1, TITLE: Deconfounded Video Moment Retrieval with Causal Intervention
https://dl.acm.org/doi/abs/10.1145/3404835.3462823
AUTHORS: Xun Yang, Fuli Feng, Wei Ji, Meng Wang, Tat-Seng Chua
HIGHLIGHT: To fill the research gap, we propose a causality-inspired VMR framework that builds structural causal model to capture the true effect of query and video content on the prediction.

2, TITLE: Causal Intervention for Leveraging Popularity Bias in Recommendation
https://dl.acm.org/doi/abs/10.1145/3404835.3462875
AUTHORS: Yang Zhang, Fuli Feng, Xiangnan He, Tianxin Wei, Chonggang Song, Guohui Ling, Yongdong Zhang
HIGHLIGHT: To achieve our goal, we propose a new training and inference paradigm for recommendation named Popularity-bias Deconfounding and Adjusting (PDA).

3, TITLE: AutoDebias: Learning to Debias for Recommendation
https://dl.acm.org/doi/abs/10.1145/3404835.3462919
AUTHORS: Jiawei Chen, Hande Dong, Yang Qiu, Xiangnan He, Xin Xin, Liang Chen, Guli Lin, Keping Yang
HIGHLIGHT: To move this idea forward, we propose AotoDebias that leverages another (small) set of uniform data to optimize the debiasing parameters by solving the bi-level optimization problem with meta-learning.

4, TITLE: Mitigating Sentiment Bias for Recommender Systems
https://dl.acm.org/doi/abs/10.1145/3404835.3462943
AUTHORS: Chen Lin, Xinyi Liu, Guipeng Xv, Hui Li
HIGHLIGHT: This paper reveals an unexplored type of bias, i.e., sentiment bias.

5, TITLE: Counterfactual Reward Modification for Streaming Recommendation with Delayed Feedback
https://dl.acm.org/doi/abs/10.1145/3404835.3462892
AUTHORS: Xiao Zhang, Haonan Jia, Hanjing Su, Wenhan Wang, Jun Xu, Ji-Rong Wen
HIGHLIGHT: In this paper, we propose a novel and theoretic sound counterfactual approach to adjusting the user feedbacks and learning the recommendation models, called CBDF (Counterfactual Bandit with Delayed Feedback).

6, TITLE: Joint Knowledge Pruning and Recurrent Graph Convolution for News Recommendation
https://dl.acm.org/doi/abs/10.1145/3404835.3462912
AUTHORS: Yu Tian, Yuhao Yang, Xudong Ren, Pengfei Wang, Fangzhao Wu, Qian Wang, Chenliang Li
HIGHLIGHT: To this end, in this paper, we propose a novel knowledge pruning based recurrent graph convolutional network (named Kopra) for news recommendation.

7, TITLE: Personalized News Recommendation with Knowledge-aware Interactive Matching
https://dl.acm.org/doi/abs/10.1145/3404835.3462861
AUTHORS: Tao Qi, Fangzhao Wu, Chuhan Wu, Yongfeng Huang
HIGHLIGHT: In this paper, we propose a knowledge-aware interactive matching method for news recommendation.

8, TITLE: Enhanced Graph Learning for Collaborative Filtering via Mutual Information Maximization
https://dl.acm.org/doi/abs/10.1145/3404835.3462928
AUTHORS: Yonghui Yang, Le Wu, Richang Hong, Kun Zhang, Meng Wang
HIGHLIGHT: In this paper, we study how to better learn enhanced graph structure for CF. We argue that node embedding learning and graph structure learning can mutually enhance each other in CF, as updated node embeddings are learned from previous graph structure, and vice versa ~(i.e., newly updated graph structure are optimized based on current node embedding results).

9, TITLE: ReXPlug: Explainable Recommendation using Plug-and-Play Language Model
https://dl.acm.org/doi/abs/10.1145/3404835.3462939
AUTHORS: Deepesh V. Hada, Vijaikumar M., Shirish K. Shevade
HIGHLIGHT: In this work, we propose ReXPlug, an end-to-end framework with a plug and play way of explaining recommendations.

10, TITLE: Group based Personalized Search by Integrating Search Behaviour and Friend Network
https://dl.acm.org/doi/abs/10.1145/3404835.3462918
AUTHORS: Yujia Zhou, Zhicheng Dou, Bingzheng Wei, Ruobing Xie, Ji-Rong Wen
HIGHLIGHT: In this paper, we propose a neural network enhanced method to highlight similar users in semantic space.

11, TITLE: An Image is Worth a Thousand Terms? Analysis of Visual E-Commerce Search
https://dl.acm.org/doi/abs/10.1145/3404835.3462950

AUTHORS: Arnon Dagan, Ido Guy, Slava Novgorodov
HIGHLIGHT: In this work, we present an in-depth comprehensive study of visual e-commerce search.

12, TITLE: Efficiently Teaching an Effective Dense Retriever with Balanced Topic Aware Sampling
https://dl.acm.org/doi/abs/10.1145/3404835.3462891
AUTHORS: Sebastian Hofstätter, Sheng-Chieh Lin, Jheng-Hong Yang, Jimmy Lin, Allan Hanbury
HIGHLIGHT: Instead of relying on more compute capability, we introduce an efficient topic-aware query and balanced margin sampling technique, called TAS-Balanced.

13, TITLE: Learning a Fine-Grained Review-based Transformer Model for Personalized Product Search
https://dl.acm.org/doi/abs/10.1145/3404835.3462911
AUTHORS: Keping Bi, Qingyao Ai, W. Bruce Croft
HIGHLIGHT: Aware of the above limitations, we propose a review-based transformer model (RTM) for personalized product search, which encodes the sequence of query, user reviews, and item reviews with a transformer architecture.

14, TITLE: DepressionNet: Learning Multi-modalities with User Post Summarization for Depression Detection on Social Media
https://dl.acm.org/doi/abs/10.1145/3404835.3462938
AUTHORS: Hamad Zogan, Imran Razzak, Shoaib Jameel, Guandong Xu
HIGHLIGHT: To overcome the shortcomings in the existing automatic depression detection methods, we propose a novel computational framework for automatic depression detection that initially selects relevant content through a hybrid extractive and abstractive summarization strategy on the sequence of all user tweets leading to a more fine-grained and relevant content.

15, TITLE: Look Before You Leap: Confirming Edge Signs in Random Walk with Restart for Personalized Node Ranking in Signed Networks
https://dl.acm.org/doi/abs/10.1145/3404835.3462923
AUTHORS: Wonchang Lee, Yeon-Chang Lee, Dongwon Lee, Sang-Wook Kim
HIGHLIGHT: In this paper, we address the personalized node ranking (PNR) problem for signed networks, which aims to rank nodes in an order most relevant to a given seed node in a signed network.

16, TITLE: Hierarchical Multi-modal Contextual Attention Network for Fake News Detection
https://dl.acm.org/doi/abs/10.1145/3404835.3462871
AUTHORS: Shengsheng Qian, Jinguang Wang, Jun Hu, Quan Fang, Changsheng Xu
HIGHLIGHT: To overcome these limitations, this paper proposes a novel hierarchical multi-modal contextual attention network (HMCAN) for fake news detection by jointly modeling the multi-modal context information and the hierarchical semantics of text in a unified deep model.

17, TITLE: DyDiff-VAE: A Dynamic Variational Framework for Information Diffusion Prediction
https://dl.acm.org/doi/abs/10.1145/3404835.3462934
AUTHORS: Ruijie Wang, Zijie Huang, Shengzhong Liu, Huajie Shao, Dongxin Liu, Jinyang Li, Tianshi Wang, Dachun Sun, Shuochao Yao, Tarek Abdelzaher
HIGHLIGHT: This paper describes a novel diffusion model, DyDiff-VAE, for information diffusion prediction on social media.

18, TITLE: Tracing Knowledge State with Individual Cognition and Acquisition Estimation
https://dl.acm.org/doi/abs/10.1145/3404835.3462827
AUTHORS: Ting Long, Yunfei Liu, Jian Shen, Weinan Zhang, Yong Yu
HIGHLIGHT: In this paper, we propose a novel model called Individual Estimation Knowledge Tracing (IEKT), which estimates the students' cognition on the question before response prediction and assesses their knowledge acquisition sensitivity on the questions before updating the knowledge state.

19, TITLE: Knowledge-based Review Generation by Coherence Enhanced Text Planning
https://dl.acm.org/doi/abs/10.1145/3404835.3462865
AUTHORS: Junyi Li, Wayne Xin Zhao, Zhicheng Wei, Nicholas Jing Yuan, Ji-Rong Wen
HIGHLIGHT: In this paper, we propose a novel Coherence Enhanced Text Planning model (CETP) based on knowledge graphs (KGs) to improve both global and local coherence for review generation.

20, TITLE: UGRec: Modeling Directed and Undirected Relations for Recommendation
https://dl.acm.org/doi/abs/10.1145/3404835.3462835
AUTHORS: Xinxiao Zhao, Zhiyong Cheng, Lei Zhu, Jiecai Zheng, Xueqing Li

HIGHLIGHT: In this work, we make an effort to study the potential of integrating both types of side information (i.e., KG and item-item co-occurrence data) for recommendation.

21, TITLE: DEKR: Description Enhanced Knowledge Graph for Machine Learning Method Recommendation
https://dl.acm.org/doi/abs/10.1145/3404835.3462900
AUTHORS: Xianshuai Cao, Yuliang Shi, Han Yu, Jihu Wang, Xinjun Wang, Zhongmin Yan, Zhiyong Chen
HIGHLIGHT: In this paper, we propose a description-enhanced machine learning knowledge graph-based approach - DEKR - to help recommend appropriate ML methods for given ML datasets.

22, TITLE: Relational Learning with Gated and Attentive Neighbor Aggregator for Few-Shot Knowledge Graph Completion
https://dl.acm.org/doi/abs/10.1145/3404835.3462925
AUTHORS: Guanglin Niu, Yang Li, Chengguang Tang, Ruiying Geng, Jian Dai, Qiao Liu, Hao Wang, Jian Sun, Fei Huang, Luo Si
HIGHLIGHT: In this paper, we propose a few-shot relational learning with global-local framework to address the above issues.

23, TITLE: AdsGNN: Behavior-Graph Augmented Relevance Modeling in Sponsored Search
https://dl.acm.org/doi/abs/10.1145/3404835.3462926
AUTHORS: Chaozhuo Li, Bochen Pang, Yuming Liu, Hao Sun, Zheng Liu, Xing Xie, Tianqi Yang, Yanling Cui, Liangjie Zhang, Qi Zhang
HIGHLIGHT: In this paper, we extensively investigate how to naturally fuse the semantic textual information with the user behavior graph, and further propose three novel AdsGNN models to aggregate topological neighborhood from the perspectives of nodes, edges and tokens.

24, TITLE: Hybrid Learning to Rank for Financial Event Ranking
https://dl.acm.org/doi/abs/10.1145/3404835.3462969
AUTHORS: Fuli Feng, Moxin Li, Cheng Luo, Ritchie Ng, Tat-Seng Chua
HIGHLIGHT: In this work, we formulate the financial event ranking task, which aims to score financial news (document) according to its influence to the given asset (query).

25, TITLE: Hybrid Fusion with Intra- and Cross-Modality Attention for Image-Recipe Retrieval
https://dl.acm.org/doi/abs/10.1145/3404835.3462965
AUTHORS: Jiao Li, Xing Xu, Wei Yu, Fumin Shen, Zuo Cao, Kai Zuo, Heng Tao Shen
HIGHLIGHT: To this end, we propose a novel framework namedHybrid Fusion with Intra- and Cross-Modality Attention (HF-ICMA) to learn accurate image-recipe similarity.

26, TITLE: PreSizE: Predicting Size in E-Commerce using Transformers
https://dl.acm.org/doi/abs/10.1145/3404835.3462844
AUTHORS: Yotam Eshel, Or Levi, Haggai Roitman, Alex Nus
HIGHLIGHT: Predicting a proper size for an item to recommend is an important personalization challenge, and is being studied in this work.

27, TITLE: Understanding and Mitigating Bias in Online Health Search
https://dl.acm.org/doi/abs/10.1145/3404835.3462930
AUTHORS: Anat Hashavit, Hongning Wang, Raz Lin, Tamar Stern, Sarit Kraus
HIGHLIGHT: Content can be biased and results may present different opinions. In addition, interpreting medically related content can be difficult for users with no medical background. All of these can lead users to incorrect conclusions regarding health related questions. In this work we address this problem from two perspectives.

28, TITLE: Enhanced Doubly Robust Learning for Debiasing Post-Click Conversion Rate Estimation
https://dl.acm.org/doi/abs/10.1145/3404835.3462917
AUTHORS: Siyuan Guo, Lixin Zou, Yiding Liu, Wenwen Ye, Suqi Cheng, Shuaiqiang Wang, Hechang Chen, Dawei Yin, Yi Chang
HIGHLIGHT: To solve these problems, we first derive the bias and variance of the DR estimator. Based on it, a more robust doubly robust (MRDR) estimator has been proposed to further reduce its variance while retaining its double robustness.

29, TITLE: Adapting Interactional Observation Embedding for Counterfactual Learning to Rank
https://dl.acm.org/doi/abs/10.1145/3404835.3462901
AUTHORS: Mouxiang Chen, Chenghao Liu, Jianling Sun, Steven C.H. Hoi

HIGHLIGHT: In this work, we leverage the embedding method to develop an Interactional Observation-Based Model (IOBM) to estimate the observation probability.

30, TITLE: This Is Not What We Ordered: Exploring Why Biased Search Result Rankings Affect User Attitudes on Debated Topics
https://dl.acm.org/doi/abs/10.1145/3404835.3462851
AUTHORS: Tim Draws, Nava Tintarev, Ujwal Gadiraju, Alessandro Bozzon, Benjamin Timmermans
HIGHLIGHT: To better understand the mechanisms underlying SEME, we present a pre-registered, 5 x 3 factorial user study investigating whether order effects (i.e., users adopting the viewpoint pertaining to higher-ranked documents) can cause SEME.

31, TITLE: Societal Biases in Retrieved Contents: Measurement Framework and Adversarial Mitigation of BERT Rankers
https://dl.acm.org/doi/abs/10.1145/3404835.3462949
AUTHORS: Navid Rekabsaz, Simone Kopeinik, Markus Schedl
HIGHLIGHT: To mitigate these biases, we propose AdvBert, a ranking model achieved by adapting adversarial bias mitigation for IR, which jointly learns to predict relevance and remove protected attributes.

32, TITLE: Binary Neural Network Hashing for Image Retrieval
https://dl.acm.org/doi/abs/10.1145/3404835.3462896
AUTHORS: Wanqian Zhang, Dayan Wu, Yu Zhou, Bo Li, Weiping Wang, Dan Meng
HIGHLIGHT: In this paper, we propose a novel deep hashing method, called Binary Neural Network Hashing (BNNH) for fast image retrieval.

33, TITLE: Unsupervised Proxy Selection for Session-based Recommender Systems
https://dl.acm.org/doi/abs/10.1145/3404835.3462958
AUTHORS: Junsu Cho, SeongKu Kang, Dongmin Hyun, Hwanjo Yu
HIGHLIGHT: To this end, we propose a novel framework to overcome the limitation of SRSs, named ProxySR, which imitates the missing information in SRSs (i.e., general interest of users) by modeling proxies of sessions.

34, TITLE: xLightFM: Extremely Memory-Efficient Factorization Machine
https://dl.acm.org/doi/abs/10.1145/3404835.3462941
AUTHORS: Gangwei Jiang, Hao Wang, Jin Chen, Haoyu Wang, Defu Lian, Enhong Chen
HIGHLIGHT: To this end, in this paper, we propose an extremely memory-efficient Factorization Machine (xLightFM), where each category embedding is composited with latent vectors selected from codebooks.

35, TITLE: Counterfactual Data-Augmented Sequential Recommendation
https://dl.acm.org/doi/abs/10.1145/3404835.3462855
AUTHORS: Zhenlei Wang, Jingsen Zhang, Hongteng Xu, Xu Chen, Yongfeng Zhang, Wayne Xin Zhao, Ji-Rong Wen
HIGHLIGHT: In this paper, we propose a novel counterfactual data augmentation framework to mitigate the impact of the imperfect training data and empower sequential recommendation models.

36, TITLE: StackRec: Efficient Training of Very Deep Sequential Recommender Models by Iterative Stacking
https://dl.acm.org/doi/abs/10.1145/3404835.3462890
AUTHORS: Jiachun Wang, Fajie Yuan, Jian Chen, Qingyao Wu, Min Yang, Yang Sun, Guoxiao Zhang
HIGHLIGHT: To deal with such a challenge, we present StackRec, a simple, yet very effective and efficient training framework for deep SR models by iterative layer stacking.

37, TITLE: CauseRec: Counterfactual User Sequence Synthesis for Sequential Recommendation
https://dl.acm.org/doi/abs/10.1145/3404835.3462908
AUTHORS: Shengyu Zhang, Dong Yao, Zhou Zhao, Tat-Seng Chua, Fei Wu
HIGHLIGHT: In this paper, we propose to learn accurate and robust user representations, which are required to be less sensitive to (attack on) noisy behaviors and trust more on the indispensable ones, by modeling counterfactual data distribution.

38, TITLE: Sequential Recommendation with Graph Neural Networks
https://dl.acm.org/doi/abs/10.1145/3404835.3462968
AUTHORS: Jianxin Chang, Chen Gao, Yu Zheng, Yiqun Hui, Yanan Niu, Yang Song, Depeng Jin, Yong Li
HIGHLIGHT: In this work, we propose a graph neural network model called SURGE (short forSeqUential Recommendation with Graph neural nEtworks) to address these two issues.

39, TITLE: Category-aware Collaborative Sequential Recommendation
https://dl.acm.org/doi/abs/10.1145/3404835.3462832

AUTHORS: Renqin Cai, Jibang Wu, Aidan San, Chong Wang, Hongning Wang
HIGHLIGHT: To tackle these challenges, we propose a Category-aware Collaborative Sequential Recommender.

40, TITLE: Event Occurrence Date Estimation based on Multivariate Time Series Analysis over Temporal Document Collections
https://dl.acm.org/doi/abs/10.1145/3404835.3462885
AUTHORS: Jiexin Wang, Adam Jatowt, Masatoshi Yoshikawa
HIGHLIGHT: In this paper we propose an approach to temporal profiling of event mentions in text.

41, TITLE: Temporal Knowledge Graph Reasoning Based on Evolutional Representation Learning
https://dl.acm.org/doi/abs/10.1145/3404835.3462963
AUTHORS: Zixuan Li, Xiaolong Jin, Wei Li, Saiping Guan, Jiafeng Guo, Huawei Shen, Yuanzhuo Wang, Xueqi Cheng
HIGHLIGHT: To capture these properties effectively and efficiently, we propose a novel Recurrent Evolution network based on Graph Convolution Network (GCN), called RE-GCN, which learns the evolutional representations of entities and relations at each timestamp by modeling the KG sequence recurrently.

42, TITLE: Summarize Dates First: A Paradigm Shift in Timeline Summarization
https://dl.acm.org/doi/abs/10.1145/3404835.3462954
AUTHORS: Moreno La Quatra, Luca Cagliero, Elena Baralis, Alberto Messina, Maurizio Montagnuolo
HIGHLIGHT: This paper proposes a paradigm shift in timeline summarization aimed at overcoming the above issues.

43, TITLE: TIE: A Framework for Embedding-based Incremental Temporal Knowledge Graph Completion
https://dl.acm.org/doi/abs/10.1145/3404835.3462961
AUTHORS: Jiapeng Wu, Yishi Xu, Yingxue Zhang, Chen Ma, Mark Coates, Jackie Chi Kit Cheung
HIGHLIGHT: To address these challenges, we present the Time-aware Incremental Embedding (TIE) framework, which combines TKG representation learning, experience replay, and temporal regularization.

44, TITLE: Allowing for The Grounded Use of Temporal Difference Learning in Large Ranking Models via Substate Updates
https://dl.acm.org/doi/abs/10.1145/3404835.3462952
AUTHORS: Daniel Cohen
HIGHLIGHT: We introduce a modification of an established reinforcement learning method to facilitate the widespread use of temporal difference learning for IR: interpolated substate temporal difference (ISSTD) learning.

45, TITLE: Answer Complex Questions: Path Ranker Is All You Need
https://dl.acm.org/doi/abs/10.1145/3404835.3462942
AUTHORS: Xinyu Zhang, Ke Zhan, Enrui Hu, Chengzhen Fu, Lan Luo, Hao Jiang, Yantao Jia, Fan Yu, Zhicheng Dou, Zhao Cao, Lei Chen
HIGHLIGHT: In this paper, we propose a purely rank-based framework Thinking Path Re-Ranker (TPRR), which is comprised of Thinking Path Ranker (TPR) for generating document sequences called "a path" and External Path Reranker (EPR) for selecting the best path from candidate paths generated by TPR.

46, TITLE: Reinforcement Learning from Reformulations in Conversational Question Answering over Knowledge Graphs
https://dl.acm.org/doi/abs/10.1145/3404835.3462859
AUTHORS: Magdalena Kaiser, Rishiraj Saha Roy, Gerhard Weikum
HIGHLIGHT: In this work, we take a step towards a more natural learning paradigm - from noisy and implicit feedback via question reformulations.

47, TITLE: Ranking User-Generated Content via Multi-Relational Graph Convolution
https://dl.acm.org/doi/abs/10.1145/3404835.3462857
AUTHORS: Kanika Narang, Adit Krishnan, Junting Wang, Chaoqi Yang, Hari Sundaram, Carolyn Sutter
HIGHLIGHT: In this paper, we demonstrate the utility of considering the implicit and explicit relational aspects across user content to assess their quality.

48, TITLE: Answering Any-hop Open-domain Questions with Iterative Document Reranking
https://dl.acm.org/doi/abs/10.1145/3404835.3462853
AUTHORS: Yuyu Zhang, Ping Nie, Arun Ramamurthy, Le Song
HIGHLIGHT: To address these challenges, we propose a unified QA framework to answer any-hop open-domain questions, which iteratively retrieves, reranks and filters documents, and adaptively determines when to stop the retrieval process.

49, TITLE: Multimodal Activation: Awakening Dialog Robots without Wake Words
https://dl.acm.org/doi/abs/10.1145/3404835.3462964
AUTHORS: Liqiang Nie, Mengzhao Jia, Xuemeng Song, Ganglu Wu, Harry Cheng, Jian Gu
HIGHLIGHT: In this work, we work towards awaking the robot without wake words.

50, TITLE: RCD: Relation Map Driven Cognitive Diagnosis for Intelligent Education Systems
https://dl.acm.org/doi/abs/10.1145/3404835.3462932
AUTHORS: Weibo Gao, Qi Liu, Zhenya Huang, Yu Yin, Haoyang Bi, Mu-Chun Wang, Jianhui Ma, Shijin Wang, Yu Su
HIGHLIGHT: To this end, in this paper, we present a novel Relation map driven Cognitive Diagnosis (RCD) framework, uniformly modeling the interactive and structural relations via a multi-layer student-exercise-concept relation map.

51, TITLE: Self-Supervised Contrastive Learning for Code Retrieval and Summarization via Semantic-Preserving Transformations
https://dl.acm.org/doi/abs/10.1145/3404835.3462840
AUTHORS: Nghi D. Q. Bui, Yijun Yu, Lingxiao Jiang
HIGHLIGHT: We propose Corder, a self-supervised contrastive learning framework for source code model.

52, TITLE: Initiative-Aware Self-Supervised Learning for Knowledge-Grounded Conversations
https://dl.acm.org/doi/abs/10.1145/3404835.3462824
AUTHORS: Chuan Meng, Pengjie Ren, Zhumin Chen, Zhaochun Ren, Tengxiao Xi, Maarten de Rijke
HIGHLIGHT: In this paper, we propose a mixed-initiative knowledge selection method (MIKe) for KGC, which explicitly distinguishes between user-initiative and system-initiative knowledge selection.

53, TITLE: Wizard of Search Engine: Access to Information Through Conversations with Search Engines
https://dl.acm.org/doi/abs/10.1145/3404835.3462897
AUTHORS: Pengjie Ren, Zhongkun Liu, Xiaomeng Song, Hongtao Tian, Zhumin Chen, Zhaochun Ren, Maarten de Rijke
HIGHLIGHT: In this work, we make three main contributions to facilitate research into CIS: (1) We formulate a pipeline for CIS with six subtasks: intent detection, keyphrase extraction, action prediction, query selection, passage selection, and response generation. (2) We release a benchmark dataset, called wizard of search engine (WISE), which allows for comprehensive and in-depth research on all aspects of CIS. (3) We design a neural architecture capable of training and evaluating both jointly and separately on the six sub-tasks, and devise a pre-train/fine-tune learning scheme, that can reduce the requirements of WISE in scale by making full use of available data.

54, TITLE: Semi-Supervised Variational Reasoning for Medical Dialogue Generation
https://dl.acm.org/doi/abs/10.1145/3404835.3462921
AUTHORS: Dongdong Li, Zhaochun Ren, Pengjie Ren, Zhumin Chen, Miao Fan, Jun Ma, Maarten de Rijke
HIGHLIGHT: We propose an end-to-end variational reasoning approach to medical dialogue generation.

55, TITLE: One Chatbot Per Person: Creating Personalized Chatbots based on Implicit User Profiles
https://dl.acm.org/doi/abs/10.1145/3404835.3462828
AUTHORS: Zhengyi Ma, Zhicheng Dou, Yutao Zhu, Hanxun Zhong, Ji-Rong Wen
HIGHLIGHT: In this paper, we propose to learn implicit user profiles automatically from large-scale user dialogue history for building personalized chatbots.

56, TITLE: Partner Matters! An Empirical Study on Fusing Personas for Personalized Response Selection in Retrieval-Based Chatbots
https://dl.acm.org/doi/abs/10.1145/3404835.3462858
AUTHORS: Jia-Chen Gu, Hui Liu, Zhen-Hua Ling, Quan Liu, Zhigang Chen, Xiaodan Zhu
HIGHLIGHT: This paper makes an attempt to thoroughly explore the impact of utilizing personas that describe either self or partner speakers on the task of response selection in retrieval-based chatbots.

57, TITLE: Learning Recommender Systems with Implicit Feedback via Soft Target Enhancement
https://dl.acm.org/doi/abs/10.1145/3404835.3462863
AUTHORS: Mingyue Cheng, Fajie Yuan, Qi Liu, Shenyang Ge, Zhi Li, Runlong Yu, Defu Lian, Senchao Yuan, Enhong Chen
HIGHLIGHT: In this work, we propose SoftRec, a new RS optimization framework to enhance item recommendation.

58, TITLE: Set2setRank: Collaborative Set to Set Ranking for Implicit Feedback based Recommendation
https://dl.acm.org/doi/abs/10.1145/3404835.3462886
AUTHORS: Lei Chen, Le Wu, Kun Zhang, Richang Hong, Meng Wang

HIGHLIGHT: To this end, in this paper, we explore the unique characteristics of the implicit feedback and propose Set2setRank framework for recommendation.

59, TITLE: Package Recommendation with Intra- and Inter-Package Attention Networks
https://dl.acm.org/doi/abs/10.1145/3404835.3462841
AUTHORS: Chen Li, Yuanfu Lu, Wei Wang, Chuan Shi, Ruobing Xie, Haili Yang, Cheng Yang, Xu Zhang, Leyu Lin
HIGHLIGHT: Thus, in this paper, we make a first study on package recommendation and propose an Intra- and inter-package attention network for Package Recommendation (IPRec).

60, TITLE: A Guided Learning Approach for Item Recommendation via Surrogate Loss Learning
https://dl.acm.org/doi/abs/10.1145/3404835.3462864
AUTHORS: Ahmed Rashed, Josif Grabocka, Lars Schmidt-Thieme
HIGHLIGHT: In this paper, we address the limitations of directly optimizing the NDCG measure by proposing a guided learning approach (GuidedRec) that adopts recent advances in parameterized surrogate losses for NDCG.

61, TITLE: Structured Graph Convolutional Networks with Stochastic Masks for Recommender Systems
https://dl.acm.org/doi/abs/10.1145/3404835.3462868
AUTHORS: Huiyuan Chen, Lan Wang, Yusan Lin, Chin-Chia Michael Yeh, Fei Wang, Hao Yang
HIGHLIGHT: Here we propose Structured Graph Convolutional Networks (SGCNs) to enhance the performance of GCNs by exploiting graph structural properties of sparsity and low rank.

62, TITLE: WGCN: Graph Convolutional Networks with Weighted Structural Features
https://dl.acm.org/doi/abs/10.1145/3404835.3462834
AUTHORS: Yunxiang Zhao, Jianzhong Qi, Qingwei Liu, Rui Zhang
HIGHLIGHT: To explore the directional structural information for different nodes, we propose a GCN model with weighted structural features, named WGCN.

63, TITLE: Privacy Protection in Deep Multi-modal Retrieval
https://dl.acm.org/doi/abs/10.1145/3404835.3462837
AUTHORS: Peng-Fei Zhang, Yang Li, Zi Huang, Hongzhi Yin
HIGHLIGHT: In this paper, we propose a novel PrIvacy Protection method (PIP) against malicious multi-modal retrieval models, which proactively transfers original data into adversarial data with quasi-imperceptible perturbations before releasing them.

64, TITLE: Learning Discriminative Neural Representations for Event Detection
https://dl.acm.org/doi/abs/10.1145/3404835.3462977
AUTHORS: Jinzhi Liao, Xiang Zhao, Xinyi Li, Lingling Zhang, Jiuyang Tang
HIGHLIGHT: To address the challenge, we propose to learn discriminative neural representations (DNR) from texts.

65, TITLE: Not All Relevance Scores are Equal: Efficient Uncertainty and Calibration Modeling for Deep Retrieval Models
https://dl.acm.org/doi/abs/10.1145/3404835.3462951
AUTHORS: Daniel Cohen, Bhaskar Mitra, Oleg Lesota, Navid Rekabsaz, Carsten Eickhoff
HIGHLIGHT: In this paper, we address this problem via an efficient Bayesian framework for retrieval models which captures the model's belief in the relevance score through a stochastic process while adding only negligible computational overhead.

66, TITLE: Interpretable Graph Similarity Computation via Differentiable Optimal Alignment of Node Embeddings
https://dl.acm.org/doi/abs/10.1145/3404835.3462960
AUTHORS: Khoa D. Doan, Saurav Manchanda, Suchismit Mahapatra, Chandan K. Reddy
HIGHLIGHT: This paper aims at efficiently approximating these domain-agnostic similarity measures through a neural network, and simultaneously learning the alignments (i.e., explanations) similar to those of classical intractable methods.

67, TITLE: MMConv: An Environment for Multimodal Conversational Search across Multiple Domains
https://dl.acm.org/doi/abs/10.1145/3404835.3462970
AUTHORS: Lizi Liao, Le Hong Long, Zheng Zhang, Minlie Huang, Tat-Seng Chua
HIGHLIGHT: To address this fundamental obstacle, we introduce the Multimodal Multi-domain Conversational dataset (MMConv), a fully annotated collection of human-to-human role-playing dialogues spanning over multiple domains and tasks.

68, TITLE: Video Corpus Moment Retrieval with Contrastive Learning
https://dl.acm.org/doi/abs/10.1145/3404835.3462874
AUTHORS: Hao Zhang, Aixin Sun, Wei Jing, Guoshun Nan, Liangli Zhen, Joey Tianyi Zhou, Rick Siow Mong Goh

HIGHLIGHT: In this paper, we propose a Retrieval and Localization Network with Contrastive Learning (ReLoCLNet) for VCMR.

69, TITLE: One Person, One Model, One World: Learning Continual User Representation without Forgetting
https://dl.acm.org/doi/abs/10.1145/3404835.3462884
AUTHORS: Fajie Yuan, Guoxiao Zhang, Alexandros Karatzoglou, Joemon Jose, Beibei Kong, Yudong Li
HIGHLIGHT: In this paper, we delve on research to continually learn user representations task by task, whereby new tasks are learned while using partial parameters from old ones.

70, TITLE: Learning Domain Semantics and Cross-Domain Correlations for Paper Recommendation
https://dl.acm.org/doi/abs/10.1145/3404835.3462975
AUTHORS: Yi Xie, Yuqing Sun, Elisa Bertino
HIGHLIGHT: In this paper we investigate knowledge propagation and characterize semantic correlations for cross discipline paper recommendation.

71, TITLE: FedCT: Federated Collaborative Transfer for Recommendation
https://dl.acm.org/doi/abs/10.1145/3404835.3462825
AUTHORS: Shuchang Liu, Shuyuan Xu, Wenhui Yu, Zuohui Fu, Yongfeng Zhang, Amelie Marian
HIGHLIGHT: However, this solution usually requires direct information sharing between service providers on the cloud which may not always be available and brings privacy concerns. In this paper, we show that one can overcome these concerns through learning on edge devices such as smartphones and laptops.

72, TITLE: Self-supervised Graph Learning for Recommendation
https://dl.acm.org/doi/abs/10.1145/3404835.3462862
AUTHORS: Jiancan Wu, Xiang Wang, Fuli Feng, Xiangnan He, Liang Chen, Jianxun Lian, Xing Xie
HIGHLIGHT: In this work, we explore self-supervised learning on user-item graph, so as to improve the accuracy and robustness of GCNs for recommendation.

73, TITLE: Modeling Intent Graph for Search Result Diversification
https://dl.acm.org/doi/abs/10.1145/3404835.3462872
AUTHORS: Zhan Su, Zhicheng Dou, Yutao Zhu, Xubo Qin, Ji-Rong Wen
HIGHLIGHT: On the intent graph, documents are connected if they are similar, while the query and the document are gradually connected based on the document selection result. Then we employ graph convolutional networks (GCNs) to update the representation of the query and each document by aggregating its neighbors.

74, TITLE: Enhancing Domain-Level and User-Level Adaptivity in Diversified Recommendation
https://dl.acm.org/doi/abs/10.1145/3404835.3462957
AUTHORS: Yile Liang, Tieyun Qian, Qing Li, Hongzhi Yin
HIGHLIGHT: In this paper, we focus on enhancing both domain-level and user-level adaptivity in diversified recommendation.

75, TITLE: Graph Meta Network for Multi-Behavior Recommendation
https://dl.acm.org/doi/abs/10.1145/3404835.3462972
AUTHORS: Lianghao Xia, Yong Xu, Chao Huang, Peng Dai, Liefeng Bo
HIGHLIGHT: To tackle the above challenges, we propose a Multi-Behavior recommendation framework with Graph Meta Network to incorporate the multi-behavior pattern modeling into a meta-learning paradigm.

76, TITLE: Fairness among New Items in Cold Start Recommender Systems
https://dl.acm.org/doi/abs/10.1145/3404835.3462948
AUTHORS: Ziwei Zhu, Jingu Kim, Trung Nguyen, Aish Fenton, James Caverlee
HIGHLIGHT: This paper investigates recommendation fairness among new items.

77, TITLE: Make It Easy: An Effective End-to-End Entity Alignment Framework
https://dl.acm.org/doi/abs/10.1145/3404835.3462870
AUTHORS: Congcong Ge, Xiaoze Liu, Lu Chen, Baihua Zheng, Yunjun Gao
HIGHLIGHT: This paper proposes EASY, an effective end-to-end EA framework, which is able to (i) remove the labor-intensive pre-processing by fully discovering the name information provided by the entities themselves; and (ii) jointly fuse the features captured by the names of entities and the structural information of the graph to improve the EA results.

78, TITLE: Files of a Feather Flock Together? Measuring and Modeling How Users Perceive File Similarity in Cloud Storage
https://dl.acm.org/doi/abs/10.1145/3404835.3462845
AUTHORS: Will Brackenbury, Galen Harrison, Kyle Chard, Aaron Elmore, Blase Ur
HIGHLIGHT: To this end, we conducted an online study combining automated analysis of 50 Google Drive and Dropbox users' cloud accounts with a survey asking about pairs of files from those accounts.

79, TITLE: CINES: Explore Citation Network and Event Sequences for Citation Forecasting
https://dl.acm.org/doi/abs/10.1145/3404835.3462903
AUTHORS: Fang He, Wang-Chien Lee, Tao-Yang Fu, Zhen Lei
HIGHLIGHT: In this paper, we propose to explore both the citation network and the related citation event sequences which provide valuable information for future citation forecasting.

80, TITLE: Learning to Ask Appropriate Questions in Conversational Recommendation
https://dl.acm.org/doi/abs/10.1145/3404835.3462839
AUTHORS: Xuhui Ren, Hongzhi Yin, Tong Chen, Hao Wang, Zi Huang, Kai Zheng
HIGHLIGHT: To mitigate these issues, we propose the Knowledge-Based Question Generation System (KBQG), a novel framework for conversational recommendation.

81, TITLE: Multi-Modal Supplementary-Complementary Summarization using Multi-Objective Optimization
https://dl.acm.org/doi/abs/10.1145/3404835.3462877
AUTHORS: Anubhav Jangra, Sriparna Saha, Adam Jatowt, Mohammed Hasanuzzaman
HIGHLIGHT: In this paper, we introduce and formally define the concepts of supplementary and complementary multi-modal summaries in the context of the overlap of information covered by different modalities in the summary output.

82, TITLE: Few-Shot Conversational Dense Retrieval
https://dl.acm.org/doi/abs/10.1145/3404835.3462856
AUTHORS: Shi Yu, Zhenghao Liu, Chenyan Xiong, Tao Feng, Zhiyuan Liu
HIGHLIGHT: In this paper, we present a Conversational Dense Retrieval system, ConvDR, that learns contextualized embeddings for multi-turn conversational queries and retrieves documents solely using embedding dot products.

83, TITLE: Conversational Fashion Image Retrieval via Multiturn Natural Language Feedback
https://dl.acm.org/doi/abs/10.1145/3404835.3462881
AUTHORS: Yifei Yuan, Wai Lam
HIGHLIGHT: We propose a novel framework that can effectively handle conversational fashion image retrieval with multiturn natural language feedback texts.

84, TITLE: Neural Graph Matching based Collaborative Filtering
https://dl.acm.org/doi/abs/10.1145/3404835.3462833
AUTHORS: Yixin Su, Rui Zhang, Sarah M. Erfani, Junhao Gan
HIGHLIGHT: To address this drawback, we propose a neural Graph Matching based Collaborative Filtering model (GMCF), which effectively captures the two types of attribute interactions through modeling and aggregating attribute interactions in a graph matching structure for recommendation.

85, TITLE: The World is Binary: Contrastive Learning for Denoising Next Basket Recommendation
https://dl.acm.org/doi/abs/10.1145/3404835.3462836
AUTHORS: Yuqi Qin, Pengfei Wang, Chenliang Li
HIGHLIGHT: To this end, in this paper, we propose a Contrastive Learning Model~(named CLEA) to automatically extract items relevant to the target item for next basket recommendation.

86, TITLE: Dual Attention Transfer in Session-based Recommendation with Multi-dimensional Integration
https://dl.acm.org/doi/abs/10.1145/3404835.3462866
AUTHORS: Chen Chen, Jie Guo, Bin Song
HIGHLIGHT: To this end, a new method is proposed in this paper, which is called dual attention transfer based on multi-dimensional integration (DAT-MDI): (i) DAT uses a potential mapping method based on a slot attention mechanism to extract the user's representation information in different sessions between multiple domains. (ii) MDI combines the graph neural network for the graphs (session graph and global graph) and the gate recurrent unit (GRU) for the sequence to learn the item representation in each session.

87, TITLE: User-Centric Path Reasoning towards Explainable Recommendation
https://dl.acm.org/doi/abs/10.1145/3404835.3462847

AUTHORS: Chang-You Tai, Liang-Ying Huang, Chien-Kun Huang, Lun-Wei Ku
HIGHLIGHT: In this paper, we propose UCPR, a user-centric path reasoning network that constantly guides the search from the aspect of user demand and enables explainable recommendations.

88, TITLE: On Interpretation and Measurement of Soft Attributes for Recommendation
https://dl.acm.org/doi/abs/10.1145/3404835.3462893
AUTHORS: Krisztian Balog, Filip Radlinski, Alexandros Karatzoglou
HIGHLIGHT: We address how to robustly interpret natural language refinements (or critiques) in recommender systems.

89, TITLE: How do Online Learning to Rank Methods Adapt to Changes of Intent?
https://dl.acm.org/doi/abs/10.1145/3404835.3462937
AUTHORS: Shengyao Zhuang, Guido Zuccon
HIGHLIGHT: In this paper, we address this gap by study the capability of OLTR algorithms to adapt to user intent change.

90, TITLE: Scalable Personalised Item Ranking through Parametric Density Estimation
https://dl.acm.org/doi/abs/10.1145/3404835.3462933
AUTHORS: Riku Togashi, Masahiro Kato, Mayu Otani, Tetsuya Sakai, Shin'ichi Satoh
HIGHLIGHT: In this paper, we propose a learning-to-rank approach, which achieves convergence speed comparable to the pointwise counterpart while performing similarly to the pairwise counterpart in terms of ranking effectiveness.

91, TITLE: New Insights into Metric Optimization for Ranking-based Recommendation
https://dl.acm.org/doi/abs/10.1145/3404835.3462973
AUTHORS: Roger Zhe Li, Julián Urbano, Alan Hanjalic
HIGHLIGHT: In this paper, we dig deeper into this issue in order to learn more about the effects of the choice of the metric to optimize on the performance of a ranking-based recommender system.

92, TITLE: Fast Attention-based Learning-To-Rank Model for Structured Map Search
https://dl.acm.org/doi/abs/10.1145/3404835.3462904
AUTHORS: Chiqun Zhang, Michael R. Evans, Max Lepikhin, Dragomir Yankov
HIGHLIGHT: In this work, we propose a novel deep neural network LTR architecture, capable of seamlessly handling heterogeneous inputs, similar to GBDT-based methods.

93, TITLE: Learning to Rank for Mathematical Formula Retrieval
https://dl.acm.org/doi/abs/10.1145/3404835.3462956
AUTHORS: Behrooz Mansouri, Richard Zanibbi, Douglas W. Oard
HIGHLIGHT: In this paper, the effectiveness of retrieval models and formula representations are studied to identify their relative strengths and weaknesses.

94, TITLE: Investigating User Behavior in Legal Case Retrieval
https://dl.acm.org/doi/abs/10.1145/3404835.3462876
AUTHORS: Yunqiu Shao, Yueyue Wu, Yiqun Liu, Jiaxin Mao, Min Zhang, Shaoping Ma
HIGHLIGHT: Therefore, we focus on investigating user behavior in the scenario of legal case retrieval.

95, TITLE: NeurJudge: A Circumstance-aware Neural Framework for Legal Judgment Prediction
https://dl.acm.org/doi/abs/10.1145/3404835.3462826
AUTHORS: Linan Yue, Qi Liu, Binbin Jin, Han Wu, Kai Zhang, Yanqing An, Mingyue Cheng, Biao Yin, Dayong Wu
HIGHLIGHT: To this end, in this paper, we propose a circumstance-aware legal judgment prediction framework (i.e., NeurJudge) by exploring circumstances of crime.

96, TITLE: Legal Judgment Prediction via Relational Learning
https://dl.acm.org/doi/abs/10.1145/3404835.3462931
AUTHORS: Qian Dong, Shuzi Niu
HIGHLIGHT: To solve this problem, we first formalize LJP as a node classification problem over a global consistency graph derived from the training set.

97, TITLE: Legal Judgment Prediction with Multi-Stage Case Representation Learning in the Real Court Setting
https://dl.acm.org/doi/abs/10.1145/3404835.3462945
AUTHORS: Luyao Ma, Yating Zhang, Tianyi Wang, Xiaozhong Liu, Wei Ye, Changlong Sun, Shikun Zhang
HIGHLIGHT: In this paper, we introduce a novel challenging dataset from real courtrooms to predict the legal judgment in a reasonably encyclopedic manner by leveraging the genuine input of the case - plaintiff's claims and court debate data, from which the

case's facts are automatically recognized by comprehensively understanding the multi-role dialogues of the court debate, and then learnt to discriminate the claims so as to reach the final judgment through multi-task learning.

98, TITLE: Cross-Domain Contract Element Extraction with a Bi-directional Feedback Clause-Element Relation Network
https://dl.acm.org/doi/abs/10.1145/3404835.3462873
AUTHORS: Zihan Wang, Hongye Song, Zhaochun Ren, Pengjie Ren, Zhumin Chen, Xiaozhong Liu, Hongsong Li, Maarten de Rijke
HIGHLIGHT: We propose a framework, the Bi-directional Feedback cLause-Element relaTion network (Bi-FLEET), for the cross-domain CEE task that addresses the above challenges.

99, TITLE: TFROM: A Two-sided Fairness-Aware Recommendation Model for Both Customers and Providers
https://dl.acm.org/doi/abs/10.1145/3404835.3462882
AUTHORS: Yao Wu, Jian Cao, Guandong Xu, Yudong Tan
HIGHLIGHT: In this paper, we consider recommendation scenarios from the perspective of two sides (customers and providers).

100, TITLE: Computationally Efficient Optimization of Plackett-Luce Ranking Models for Relevance and Fairness
https://dl.acm.org/doi/abs/10.1145/3404835.3462830
AUTHORS: Harrie Oosterhuis
HIGHLIGHT: In this paper, we introduce a novel algorithm: PL-Rank, that estimates the gradient of a PL ranking model w.r.t. both relevance and fairness metrics.

101, TITLE: When Fair Ranking Meets Uncertain Inference
https://dl.acm.org/doi/abs/10.1145/3404835.3462850
AUTHORS: Avijit Ghosh, Ritam Dutt, Christo Wilson
HIGHLIGHT: In this study, we investigate how uncertainty and errors in demographic inference impact the fairness offered by fair ranking algorithms.

102, TITLE: Policy-Gradient Training of Fair and Unbiased Ranking Functions
https://dl.acm.org/doi/abs/10.1145/3404835.3462953
AUTHORS: Himank Yadav, Zhengxiao Du, Thorsten Joachims
HIGHLIGHT: To address both exogenous and endogenous sources of unfairness, we present the first learning-to-rank approach that addresses both presentation bias and merit-based fairness of exposure simultaneously.

103, TITLE: Towards Personalized Fairness based on Causal Notion
https://dl.acm.org/doi/abs/10.1145/3404835.3462966
AUTHORS: Yunqi Li, Hanxiong Chen, Shuyuan Xu, Yingqiang Ge, Yongfeng Zhang
HIGHLIGHT: To this end, we introduce a framework for achieving counterfactually fair recommendations through adversary learning by generating feature-independent user embeddings for recommendation.

104, TITLE: DAIR: A Query-Efficient Decision-based Attack on Image Retrieval Systems
https://dl.acm.org/doi/abs/10.1145/3404835.3462887
AUTHORS: Mingyang Chen, Junda Lu, Yi Wang, Jianbin Qin, Wei Wang
HIGHLIGHT: We propose an optimization-based method with a smoothed utility function to overcome the challenging discrete nature of the problem.

105, TITLE: Fight Fire with Fire: Towards Robust Recommender Systems via Adversarial Poisoning Training
https://dl.acm.org/doi/abs/10.1145/3404835.3462914
AUTHORS: Chenwang Wu, Defu Lian, Yong Ge, Zhihao Zhu, Enhong Chen, Senchao Yuan
HIGHLIGHT: To address the above limitations, we propose adversarial poisoning training (APT).

106, TITLE: Adversarial-Enhanced Hybrid Graph Network for User Identity Linkage
https://dl.acm.org/doi/abs/10.1145/3404835.3462946
AUTHORS: Xiaolin Chen, Xuemeng Song, Guozhen Peng, Shanshan Feng, Liqiang Nie
HIGHLIGHT: In this work, we investigate the user identity linkage task across different social media platforms based on heterogeneous multi-modal posts and social connections.

107, TITLE: A Study of Defensive Methods to Protect Visual Recommendation Against Adversarial Manipulation of Images
https://dl.acm.org/doi/abs/10.1145/3404835.3462848
AUTHORS: Vito Walter Anelli, Yashar Deldjoo, Tommaso Di Noia, Daniele Malitesta, Felice Antonio Merra

HIGHLIGHT: This work focuses on the defensive side of VRSs and provides general insights that could be further exploited to broaden the frontier in the field.

108, TITLE: Dynamic Modality Interaction Modeling for Image-Text Retrieval
https://dl.acm.org/doi/abs/10.1145/3404835.3462829
AUTHORS: Leigang Qu, Meng Liu, Jianlong Wu, Zan Gao, Liqiang Nie
HIGHLIGHT: To address these issues, we develop a novel modality interaction modeling network based upon the routing mechanism, which is the first unified and dynamic multimodal interaction framework towards image-text retrieval.

109, TITLE: Hierarchical Cross-Modal Graph Consistency Learning for Video-Text Retrieval
https://dl.acm.org/doi/abs/10.1145/3404835.3462974
AUTHORS: Weike Jin, Zhou Zhao, Pengcheng Zhang, Jieming Zhu, Xiuqiang He, Yueting Zhuang
HIGHLIGHT: In this paper, we propose a Hierarchical Cross-Modal Graph Consistency Learning Network (HCGC) for video-text retrieval task, which considers multi-level graph consistency for video-text matching.

110, TITLE: PAN: Prototype-based Adaptive Network for Robust Cross-modal Retrieval
https://dl.acm.org/doi/abs/10.1145/3404835.3462867
AUTHORS: Zhixiong Zeng, Shuai Wang, Nan Xu, Wenji Mao
HIGHLIGHT: In this paper, we address two important issues to increase the robustness of cross-modal retrieval system for real-world applications: handling test queries from unknown category and modality-imbalanced training data.

111, TITLE: Multi-Type Textual Reasoning for Product-Aware Answer Generation
https://dl.acm.org/doi/abs/10.1145/3404835.3462899
AUTHORS: Yue Feng, Zhaochun Ren, Weijie Zhao, Mingming Sun, Ping Li
HIGHLIGHT: In this paper, we propose a review-attribute heterogeneous graph neural network (abbreviated as RAHGNN) to model the logical relation of all multi-type text.

112, TITLE: Heterogeneous Attention Network for Effective and Efficient Cross-modal Retrieval
https://dl.acm.org/doi/abs/10.1145/3404835.3462924
AUTHORS: Tan Yu, Yi Yang, Yi Li, Lin Liu, Hongliang Fei, Ping Li
HIGHLIGHT: In this work, we propose a heterogeneous attention network (HAN) for effective and efficient cross-modal retrieval.

113, TITLE: Learning Graph Meta Embeddings for Cold-Start Ads in Click-Through Rate Prediction
https://dl.acm.org/doi/abs/10.1145/3404835.3462879
AUTHORS: Wentao Ouyang, Xiuwu Zhang, Shukui Ren, Li Li, Kun Zhang, Jinmei Luo, Zhaojie Liu, Yanlong Du
HIGHLIGHT: In this paper, we propose Graph Meta Embedding (GME) models that can rapidly learn how to generate desirable initial embeddings for new ad IDs based on graph neural networks and meta learning.

114, TITLE: Learning to Warm Up Cold Item Embeddings for Cold-start Recommendation with Meta Scaling and Shifting Networks
https://dl.acm.org/doi/abs/10.1145/3404835.3462843
AUTHORS: Yongchun Zhu, Ruobing Xie, Fuzhen Zhuang, Kaikai Ge, Ying Sun, Xu Zhang, Leyu Lin, Juan Cao
HIGHLIGHT: With the two meta networks, we propose Meta Warm Up Framework (MWUF) which learns to warm up cold ID embeddings.

115, TITLE: FORM: Follow the Online Regularized Meta-Leader for Cold-Start Recommendation
https://dl.acm.org/doi/abs/10.1145/3404835.3462831
AUTHORS: Xuehan Sun, Tianyao Shi, Xiaofeng Gao, Yanrong Kang, Guihai Chen
HIGHLIGHT: In this paper, we propose an online regularized meta-leader recommendation approaches named FORM to address such problems.

116, TITLE: Privileged Graph Distillation for Cold Start Recommendation
https://dl.acm.org/doi/abs/10.1145/3404835.3462929
AUTHORS: Shuai Wang, Kun Zhang, Le Wu, Haiping Ma, Richang Hong, Meng Wang
HIGHLIGHT: As user-item interaction behaviors and user (item) attributes naturally form a heterogeneous graph structure, in this paper, we propose a privileged graph distillation model (PGD).

117, TITLE: Supporting Metacognition during Exploratory Search with the OrgBox
https://dl.acm.org/doi/abs/10.1145/3404835.3462955

AUTHORS: Anita Crescenzi, Austin R. Ward, Yuan Li, Rob Capra
HIGHLIGHT: In this paper, we present results from our study comparing the OrgBox and OrgDoc tools.

118, TITLE: Should Graph Convolution Trust Neighbors? A Simple Causal Inference Method
https://dl.acm.org/doi/abs/10.1145/3404835.3462971
AUTHORS: Fuli Feng, Weiran Huang, Xiangnan He, Xin Xin, Qifan Wang, Tat-Seng Chua
HIGHLIGHT: This work focuses on the local structure discrepancy issue for testing nodes, which has received little scrutiny.

119, TITLE: Meta-Inductive Node Classification across Graphs
https://dl.acm.org/doi/abs/10.1145/3404835.3462915
AUTHORS: Zhihao Wen, Yuan Fang, Zemin Liu
HIGHLIGHT: In this paper, we study the problem of inductive node classification across graphs.

120, TITLE: Iterative Network Pruning with Uncertainty Regularization for Lifelong Sentiment Classification
https://dl.acm.org/doi/abs/10.1145/3404835.3462902
AUTHORS: Binzong Geng, Min Yang, Fajie Yuan, Shupeng Wang, Xiang Ao, Ruifeng Xu
HIGHLIGHT: In this paper, we propose a novel i terative network p runing with uncertainty r egularization method for l ifelong s entiment classification (IPRLS), which leverages the principles of network pruning and weight regularization.

121, TITLE: Decoupling Representation Learning and Classification for GNN-based Anomaly Detection
https://dl.acm.org/doi/abs/10.1145/3404835.3462944
AUTHORS: Yanling Wang, Jing Zhang, Shasha Guo, Hongzhi Yin, Cuiping Li, Hong Chen
HIGHLIGHT: To be less biased by the inconsistency, we propose a simple yet effective graph SSL scheme, called Deep Cluster Infomax (DCI) for node representation learning, which captures the intrinsic graph properties in more concentrated feature spaces by clustering the entire graph into multiple parts.

122, TITLE: "Did you buy it already?", Detecting Users Purchase-State From Their Product-Related Questions
https://dl.acm.org/doi/abs/10.1145/3404835.3462940
AUTHORS: Lital Kuchy, David Carmel, Thomas Huet, Elad Kravi
HIGHLIGHT: In this study we address the problem of identifying the purchase-state of users, based on product-related questions they ask on an eCommerce website.

123, TITLE: A Graph-Enhanced Click Model for Web Search
https://dl.acm.org/doi/abs/10.1145/3404835.3462895
AUTHORS: Jianghao Lin, Weiwen Liu, Xinyi Dai, Weinan Zhang, Shuai Li, Ruiming Tang, Xiuqiang He, Jianye Hao, Yong Yu
HIGHLIGHT: In this paper, we propose a novel graph-enhanced click model (GraphCM) for web search.

124, TITLE: ScaleFreeCTR: MixCache-based Distributed Training System for CTR Models with Huge Embedding Table
https://dl.acm.org/doi/abs/10.1145/3404835.3462976
AUTHORS: Huifeng Guo, Wei Guo, Yong Gao, Ruiming Tang, Xiuqiang He, Wenzhi Liu
HIGHLIGHT: To address such bottlenecks, in this paper, we propose the ScaleFreeCTR: a MixCache-based distributed training system for CTR models.

125, TITLE: Looking at CTR Prediction Again: Is Attention All You Need?
https://dl.acm.org/doi/abs/10.1145/3404835.3462936
AUTHORS: Yuan Cheng, Yanbo Xue
HIGHLIGHT: In this work, we use the discrete choice model in economics to redefine the CTR prediction problem, and propose a general neural network framework built on self-attention mechanism.

126, TITLE: Clicks can be Cheating: Counterfactual Recommendation for Mitigating Clickbait Issue
https://dl.acm.org/doi/abs/10.1145/3404835.3462962
AUTHORS: Wenjie Wang, Fuli Feng, Xiangnan He, Hanwang Zhang, Tat-Seng Chua
HIGHLIGHT: In this paper, we formulate the recommendation models as a causal graph that reflects the cause-effect factors in recommendation, and address the clickbait issue by performing counterfactual inference on the causal graph.

127, TITLE: A General Method For Automatic Discovery of Powerful Interactions In Click-Through Rate Prediction
https://dl.acm.org/doi/abs/10.1145/3404835.3462842
AUTHORS: Ze Meng, Jinnian Zhang, Yumeng Li, Jiancheng Li, Tanchao Zhu, Lifeng Sun

HIGHLIGHT: To address these problems, we propose a more general automated method for building powerful interactions named AutoPI.

128, TITLE: How Powerful are Interest Diffusion on Purchasing Prediction: A Case Study of Taocode
https://dl.acm.org/doi/abs/10.1145/3404835.3462898
AUTHORS: Xuanwen Huang, Yang Yang, Ziqiang Cheng, Shen Fan, Zhongyao Wang, Juren Li, Jun Zhang, Jingmin Chen
HIGHLIGHT: Inspired by our observations, we propose InfNet, a dynamic GNN-based framework that models the information diffusion across Taocode.

129, TITLE: B-PROP: Bootstrapped Pre-training with Representative Words Prediction for Ad-hoc Retrieval
https://dl.acm.org/doi/abs/10.1145/3404835.3462869
AUTHORS: Xinyu Ma, Jiafeng Guo, Ruqing Zhang, Yixing Fan, Yingyan Li, Xueqi Cheng
HIGHLIGHT: To tackle this problem, we propose a bootstrapped pre-training method (namely B-PROP) based on BERT for ad-hoc retrieval.

130, TITLE: Long-Tail Hashing
https://dl.acm.org/doi/abs/10.1145/3404835.3462888
AUTHORS: Yong Chen, Yuqing Hou, Shu Leng, Qing Zhang, Zhouchen Lin, Dell Zhang
HIGHLIGHT: In this paper, we propose Long-Tail Hashing Network (LTHNet), a novel two-stage deep hashing approach that addresses the problem of learning to hash for more realistic datasets where the data labels roughly exhibit a long-tail distribution.

131, TITLE: PTHash: Revisiting FCH Minimal Perfect Hashing
https://dl.acm.org/doi/abs/10.1145/3404835.3462849
AUTHORS: Giulio Ermanno Pibiri, Roberto Trani
HIGHLIGHT: Almost thirty years later we revisit their framework and present an improved algorithm that scales well to large sets and reduces space consumption altogether, without compromising the lookup time.

132, TITLE: Intra-Document Cascading: Learning to Select Passages for Neural Document Ranking
https://dl.acm.org/doi/abs/10.1145/3404835.3462889
AUTHORS: Sebastian Hofstätter, Bhaskar Mitra, Hamed Zamani, Nick Craswell, Allan Hanbury
HIGHLIGHT: To address this challenge, we adopt an intra-document cascading strategy, which prunes passages of a candidate document using a less expensive model, called ESM, before running a scoring model that is more expensive and effective, called ETM.

133, TITLE: Improving Video Retrieval by Adaptive Margin
https://dl.acm.org/doi/abs/10.1145/3404835.3462927
AUTHORS: Feng He, Qi Wang, Zhifan Feng, Wenbin Jiang, Yajuan Lü, Yong Zhu, Xiao Tan
HIGHLIGHT: While most video retrieval methods overlook that phenomenon, we propose an adaptive margin changed with the distance between positive and negative pairs to solve the aforementioned issue.

134, TITLE: Comprehensive Linguistic-Visual Composition Network for Image Retrieval
https://dl.acm.org/doi/abs/10.1145/3404835.3462967
AUTHORS: Haokun Wen, Xuemeng Song, Xin Yang, Yibing Zhan, Liqiang Nie
HIGHLIGHT: In light of the above analysis, we propose a Comprehensive Linguistic-Visual Composition Network (CLVC-Net) for image retrieval.

135, TITLE: GilBERT: Generative Vision-Language Pre-Training for Image-Text Retrieval
https://dl.acm.org/doi/abs/10.1145/3404835.3462838
AUTHORS: Weixiang Hong, Kaixiang Ji, Jiajia Liu, Jian Wang, Jingdong Chen, Wei Chu
HIGHLIGHT: In this work, we propose a generative visual-linguistic pre-training approach, termed as GilBERT, to simultaneously learn generic representations of image-text data and complete the missing modality for incomplete pairs.

136, TITLE: DeepQAMVS: Query-Aware Hierarchical Pointer Networks for Multi-Video Summarization
https://dl.acm.org/doi/abs/10.1145/3404835.3462959
AUTHORS: Safa Messaoud, Ismini Lourentzou, Assma Boughoula, Mona Zehni, Zhizhen Zhao, Chengxiang Zhai, Alexander G. Schwing
HIGHLIGHT: In this work, we introduce a novel Query-Aware Hierarchical Pointer Network for Multi-Video Summarization, termed DeepQAMVS, that jointly optimizes multiple criteria: (1) conciseness, (2) representativeness of important query-relevant events and (3) chronological soundness.

137, TITLE: Comparison-based Conversational Recommender System with Relative Bandit Feedback
https://dl.acm.org/doi/abs/10.1145/3404835.3462920
AUTHORS: Zhihui Xie, Tong Yu, Canzhe Zhao, Shuai Li
HIGHLIGHT: To enable users to provide comparative preferences during conversational interactions, we propose a novel comparison-based conversational recommender system.

138, TITLE: When and Whom to Collaborate with in a Changing Environment: A Collaborative Dynamic Bandit Solution
https://dl.acm.org/doi/abs/10.1145/3404835.3462852
AUTHORS: Chuanhao Li, Qingyun Wu, Hongning Wang
HIGHLIGHT: In this work, we develop a collaborative dynamic bandit solution to handle a changing environment for recommendation.

139, TITLE: Glider: A Reinforcement Learning Approach to Extract UI Scripts from Websites
https://dl.acm.org/doi/abs/10.1145/3404835.3462905
AUTHORS: Yuanchun Li, Oriana Riva
HIGHLIGHT: We propose Glider, an automated and scalable approach to generate tasklets from a natural language task query and a website URL.

140, TITLE: Unified Conversational Recommendation Policy Learning via Graph-based Reinforcement Learning
https://dl.acm.org/doi/abs/10.1145/3404835.3462913
AUTHORS: Yang Deng, Yaliang Li, Fei Sun, Bolin Ding, Wai Lam
HIGHLIGHT: In the light of these challenges, we propose to formulate these three decision-making problems in CRS as a unified policy learning task.

141, TITLE: Conversations Powered by Cross-Lingual Knowledge
https://dl.acm.org/doi/abs/10.1145/3404835.3462883
AUTHORS: Weiwei Sun, Chuan Meng, Qi Meng, Zhaochun Ren, Pengjie Ren, Zhumin Chen, Maarten de Rijke
HIGHLIGHT: To address this problem, we propose the task of cross-lingual knowledge grounded conversation (CKGC), where we leverage large-scale knowledge sources in another language to generate informative responses.

142, TITLE: Transformer Reasoning Network for Personalized Review Summarization
https://dl.acm.org/doi/abs/10.1145/3404835.3462854
AUTHORS: Hongyan Xu, Hongtao Liu, Pengfei Jiao, Wenjun Wang
HIGHLIGHT: In this paper, we propose a novel transformer-based reasoning framework for personalized review summarization.

143, TITLE: Leveraging Lead Bias for Zero-shot Abstractive News Summarization
https://dl.acm.org/doi/abs/10.1145/3404835.3462846
AUTHORS: Chenguang Zhu, Ziyi Yang, Robert Gmyr, Michael Zeng, Xuedong Huang
HIGHLIGHT: We propose that this lead bias can be leveraged in our favor in a simple and effective way to pre-train abstractive news summarization models on large-scale unlabeled news corpora: predicting the leading sentences using the rest of an article.

144, TITLE: Retrieving Complex Tables with Multi-Granular Graph Representation Learning
https://dl.acm.org/doi/abs/10.1145/3404835.3462909
AUTHORS: Fei Wang, Kexuan Sun, Muhao Chen, Jay Pujara, Pedro Szekely
HIGHLIGHT: To address these issues, we propose Graph-based Table Retrieval (GTR), a generalizable NLTR framework with multi-granular graph representation learning.

145, TITLE: TILDE: Term Independent Likelihood moDEl for Passage Re-ranking
https://dl.acm.org/doi/abs/10.1145/3404835.3462922
AUTHORS: Shengyao Zhuang, Guido Zuccon
HIGHLIGHT: We propose the novel, BERT-based, Term Independent Likelihood moDEl (TILDE), which ranks documents by both query and document likelihood.

146, TITLE: Path-based Deep Network for Candidate Item Matching in Recommenders
https://dl.acm.org/doi/abs/10.1145/3404835.3462878
AUTHORS: Houyi Li, Zhihong Chen, Chenliang Li, Rong Xiao, Hongbo Deng, Peng Zhang, Yongchao Liu, Haihong Tang
HIGHLIGHT: In this paper, we propose a novel matching architecture, Path-based Deep Network (named PDN), through incorporating both personalization and diversity to enhance matching performance.

147, TITLE: Optimizing Dense Retrieval Model Training with Hard Negatives
https://dl.acm.org/doi/abs/10.1145/3404835.3462880
AUTHORS: Jingtao Zhan, Jiaxin Mao, Yiqun Liu, Jiafeng Guo, Min Zhang, Shaoping Ma
HIGHLIGHT: Therefore, we propose two training strategies named a Stable Training Algorithm for dense Retrieval (STAR) and a query-side training Algorithm for Directly Optimizing Ranking pErformance (ADORE), respectively.

148, TITLE: Bootstrapping User and Item Representations for One-Class Collaborative Filtering
https://dl.acm.org/doi/abs/10.1145/3404835.3462935
AUTHORS: Dongha Lee, SeongKu Kang, Hyunjun Ju, Chanyoung Park, Hwanjo Yu
HIGHLIGHT: This paper proposes a novel OCCF framework, named as BUIR, which does not require negative sampling.

149, TITLE: Standing in Your Shoes: External Assessments for Personalized Recommender Systems
https://dl.acm.org/doi/abs/10.1145/3404835.3462916
AUTHORS: Hongyu Lu, Weizhi Ma, Min Zhang, Maarten de Rijke, Yiqun Liu, Shaoping Ma
HIGHLIGHT: This paper presents the first attempt to incorporate external assessments into preference labeling and recommendation evaluation.

150, TITLE: Evaluation Measures Based on Preference Graphs
https://dl.acm.org/doi/abs/10.1145/3404835.3462947
AUTHORS: Charles L.A. Clarke, Chengxi Luo, Mark D. Smucker
HIGHLIGHT: To address these problems, we propose an evaluation measure that computes the similarity between a directed multigraph of preferences and an actual ranking generated by a ranker.

151, TITLE: Do Affective Cues Validate Behavioural Metrics for Search?
https://dl.acm.org/doi/abs/10.1145/3404835.3462894
AUTHORS: Daniel McDuff, Paul Thomas, Nick Craswell, Kael Rowan, Mary Czerwinski
HIGHLIGHT: In this study, we analysed longitudinal, in-situ, search behaviours of 152 information workers, over the course of several weeks while simultaneously tracking their facial expressions.

152, TITLE: Current Challenges and Future Directions in Podcast Information Access
https://dl.acm.org/doi/abs/10.1145/3404835.3462805
AUTHORS: Rosie Jones, Hamed Zamani, Markus Schedl, Ching-Wei Chen, Sravana Reddy, Ann Clifton, Jussi Karlgren, Helia Hashemi, Aasish Pappu, Zahra Nazari, Longqi Yang, Oguz Semerci, Hugues Bouchard, Ben Carterette
HIGHLIGHT: In this perspective paper, we highlight the many differences between podcasts and other media, and discuss our perspective on challenges and future research directions in the domain of podcast information access.

153, TITLE: MS MARCO: Benchmarking Ranking Models in the Large-Data Regime
https://dl.acm.org/doi/abs/10.1145/3404835.3462804
AUTHORS: Nick Craswell, Bhaskar Mitra, Emine Yilmaz, Daniel Campos, Jimmy Lin
HIGHLIGHT: We show how the design of the evaluation effort can encourage or discourage certain outcomes, and raising questions about internal and external validity of results.

154, TITLE: Towards Multi-Modal Conversational Information Seeking
https://dl.acm.org/doi/abs/10.1145/3404835.3462806
AUTHORS: Yashar Deldjoo, Johanne R. Trippas, Hamed Zamani
HIGHLIGHT: Based on this research, we propose and implement a practical open-source framework for facilitating MMCIS research.

155, TITLE: AMM: Attentive Multi-field Matching for News Recommendation
https://dl.acm.org/doi/abs/10.1145/3404835.3463232
AUTHORS: Qi Zhang, Qinglin Jia, Chuyuan Wang, Jingjie Li, Zhaowei Wang, Xiuqiang He
HIGHLIGHT: In this paper, we propose an Attentive Multi-field Matching (AMM) framework for news recommendation which captures the semantic matching representations between each browsed news and candidate news, and then aggregates them as final user-news matching signal.

156, TITLE: An ALBERT-based Similarity Measure for Mathematical Answer Retrieval
https://dl.acm.org/doi/abs/10.1145/3404835.3463023
AUTHORS: Anja Reusch, Maik Thiele, Wolfgang Lehner
HIGHLIGHT: The aim of this work is to explore the modeling capabilities of state-of-the-art unsupervised deep learning methods to create such representations.

157, TITLE: An Exploration of Tester-based Evaluation of User Simulators for Comparing Interactive Retrieval Systems.
https://dl.acm.org/doi/abs/10.1145/3404835.3463091
AUTHORS: Sahiti Labhishetty, Chengxiang Zhai
HIGHLIGHT: In this paper, we propose a novel Tester-based evaluation approach to evaluating the reliability of user simulators, in which we would construct a Tester based on a set of IR systems with an expected performance pattern and apply such a Tester to a user simulator to see if the user simulator would generate the expected performance pattern.

158, TITLE: APRF-Net: Attentive Pseudo-Relevance Feedback Network for Query Categorization
https://dl.acm.org/doi/abs/10.1145/3404835.3463041
AUTHORS: Ali Ahmadvand, Sayyed M. Zahiri, Simon Hughes, Khalifeh Al Jadda, Surya Kallumadi, Eugene Agichtein
HIGHLIGHT: To this end, we propose a novel deep neural model named Attentive Pseudo Relevance Feedback Network (APRF-Net) to enhance the representation of rare queries for query categorization.

159, TITLE: Augmenting Sequential Recommendation with Pseudo-Prior Items via Reversely Pre-training Transformer
https://dl.acm.org/doi/abs/10.1145/3404835.3463036
AUTHORS: Zhiwei Liu, Ziwei Fan, Yu Wang, Philip S. Yu
HIGHLIGHT: We introduce a new framework for Augmenting Sequential Recommendation with Pseudo-prior items (ASReP).

160, TITLE: Cluster-Based Bandits: Fast Cold-Start for Recommender System New Users
https://dl.acm.org/doi/abs/10.1145/3404835.3463033
AUTHORS: Sulthana Shams, Daron Anderson, Douglas Leith
HIGHLIGHT: In this paper we introduce a new type of online learning algorithm, cluster-based bandits, to address this challenge.

161, TITLE: Contextualized Offline Relevance Weighting for Efficient and Effective Neural Retrieval
https://dl.acm.org/doi/abs/10.1145/3404835.3463073
AUTHORS: Xuanang Chen, Ben He, Kai Hui, Yiran Wang, Le Sun, Yingfei Sun
HIGHLIGHT: Inspired by the recent advances in transformer-based document expansion technique, we propose to trade offline relevance weighting for online retrieval efficiency by utilizing the powerful BERT ranker to weight the neighbour documents collected by generated pseudo-queries for each document.

162, TITLE: Conversational vs Traditional: Comparing Search Behavior and Outcome in Legal Case Retrieval
https://dl.acm.org/doi/abs/10.1145/3404835.3463064
AUTHORS: Bulou Liu, Yueyue Wu, Yiqun Liu, Fan Zhang, Yunqiu Shao, Chenliang Li, Min Zhang, Shaoping Ma
HIGHLIGHT: Based on the collected data, we compare search behavior and outcome of these two different kinds of interaction paradigms.

163, TITLE: Counterfactual Explanations for Neural Recommenders
https://dl.acm.org/doi/abs/10.1145/3404835.3463005
AUTHORS: Khanh Hiep Tran, Azin Ghazimatin, Rishiraj Saha Roy
HIGHLIGHT: In this work, we propose ACCENT, the first general framework for finding counterfactual explanations for neural recommenders.

164, TITLE: Cross-Batch Negative Sampling for Training Two-Tower Recommenders
https://dl.acm.org/doi/abs/10.1145/3404835.3463032
AUTHORS: Jinpeng Wang, Jieming Zhu, Xiuqiang He
HIGHLIGHT: Based on such facts, we propose a simple yet effective sampling strategy called Cross-Batch Negative Sampling (CBNS), which takes advantage of the encoded item embeddings from recent mini-batches to boost the model training.

165, TITLE: De-Biased Modeling of Search Click Behavior with Reinforcement Learning
https://dl.acm.org/doi/abs/10.1145/3404835.3463228
AUTHORS: Jianghong Zhou, Sayyed M. Zahiri, Simon Hughes, Khalifeh Al Jadda, Surya Kallumadi, Eugene Agichtein
HIGHLIGHT: In this paper, we propose the De-biased Reinforcement Learning Click model (DRLC).

166, TITLE: DOZEN: Cross-Domain Zero Shot Named Entity Recognition with Knowledge Graph
https://dl.acm.org/doi/abs/10.1145/3404835.3463113
AUTHORS: Hoang-Van Nguyen, Francesco Gelli, Soujanya Poria

HIGHLIGHT: We propose Cross Domain Zero Shot Named Entity Recognition with Knowledge Graph (DOZEN), which learns the relations between entities across different domains from an existing ontology of external knowledge and a set of analogies linking entities and domains.

167, TITLE: Dual Unbiased Recommender Learning for Implicit Feedback
https://dl.acm.org/doi/abs/10.1145/3404835.3463118
AUTHORS: Jae-woong Lee, Seongmin Park, Jongwuk Lee
HIGHLIGHT: This paper proposes a dual recommender learning framework that simultaneously eliminates the bias of clicked and unclicked data.

168, TITLE: Empowering News Recommendation with Pre-trained Language Models
https://dl.acm.org/doi/abs/10.1145/3404835.3463069
AUTHORS: Chuhan Wu, Fangzhao Wu, Tao Qi, Yongfeng Huang
HIGHLIGHT: In this paper, we report our work on pre-trained language models empowered news recommendation (PLM-NR).

169, TITLE: Entangled Bidirectional Encoder to Autoregressive Decoder for Sequential Recommendation
https://dl.acm.org/doi/abs/10.1145/3404835.3463016
AUTHORS: Taegwan Kang, Hwanhee Lee, Byeongjin Choe, Kyomin Jung
HIGHLIGHT: In this paper, we present a novel sequential recommendation model, Entangled BART for Recommendation (E-BART4Rec) that entangles bidirectional encoder and auto-regressive decoder with noisy transformations for user interaction.

170, TITLE: Entity Retrieval Using Fine-Grained Entity Aspects
https://dl.acm.org/doi/abs/10.1145/3404835.3463035
AUTHORS: Shubham Chatterjee, Laura Dietz
HIGHLIGHT: Using entity aspect links, we improve upon the current state-of-the-art in entity retrieval.

171, TITLE: Evaluating the Predictivity of IR Experiments
https://dl.acm.org/doi/abs/10.1145/3404835.3463040
AUTHORS: Lida Rashidi, Justin Zobel, Alistair Moffat
HIGHLIGHT: Here we explore the role of evaluation on a collection as a prediction of relative performance on collections that have different characteristics.

172, TITLE: FedCMR: Federated Cross-Modal Retrieval
https://dl.acm.org/doi/abs/10.1145/3404835.3462989
AUTHORS: Linlin Zong, Qiujie Xie, Jiahui Zhou, Peiran Wu, Xianchao Zhang, Bo Xu
HIGHLIGHT: Inspired by the recent success of federated learning, we propose the federated cross-modal retrieval (FedCMR), which learns the model with decentralized multi-modal data.

173, TITLE: Gazetteer Enhanced Named Entity Recognition for Code-Mixed Web Queries
https://dl.acm.org/doi/abs/10.1145/3404835.3463102
AUTHORS: Besnik Fetahu, Anjie Fang, Oleg Rokhlenko, Shervin Malmasi
HIGHLIGHT: This work tackles NER for code-mixed queries, where entities and non-entity query terms co-exist simultaneously in different languages.

174, TITLE: Hyperbolic Online Time Stream Modeling
https://dl.acm.org/doi/abs/10.1145/3404835.3463119
AUTHORS: Ramit Sawhney, Shivam Agarwal, Megh Thakkar, Arnav Wadhwa, Rajiv Ratn Shah
HIGHLIGHT: In this work, we propose the first Hierarchical Time-Aware Hyperbolic LSTM (HTLSTM), which leverages the Riemannian manifold for encoding the scale-free nature of a sequence of text in a time-aware fashion.

175, TITLE: ICAI-SR: Item Categorical Attribute Integrated Sequential Recommendation
https://dl.acm.org/doi/abs/10.1145/3404835.3463060
AUTHORS: Xu Yuan, Dongsheng Duan, Lingling Tong, Lei Shi, Cheng Zhang
HIGHLIGHT: In this paper, we propose an Item Categorical Attribute Integrated Sequential Recommendation (ICAI-SR) framework, which consists of an Item-Attribute Aggregation (IAA) model and Entity Sequential (ES) models.

176, TITLE: Identifying Queries in Instant Search Logs
https://dl.acm.org/doi/abs/10.1145/3404835.3463025
AUTHORS: Markus Fischer, Kristof Komlossy, Benno Stein, Martin Potthast, Matthias Hagen

HIGHLIGHT: In this paper, we present a new approach to identifying interactions belonging to the same query in instant query logs.

177, TITLE: Improving Transformer-Kernel Ranking Model Using Conformer and Query Term Independence
https://dl.acm.org/doi/abs/10.1145/3404835.3463049
AUTHORS: Bhaskar Mitra, Sebastian Hofstätter, Hamed Zamani, Nick Craswell
HIGHLIGHT: In this work, we propose a novel Conformer layer as an alternative approach to scale TK to longer input sequences.

178, TITLE: Info-flow Enhanced GANs for Recommender
https://dl.acm.org/doi/abs/10.1145/3404835.3463009
AUTHORS: Yuan Lin, Zhang Xie, Bo Xu, Kan Xu, Hongfei Lin
HIGHLIGHT: In this paper, we propose a new GAN model to enhance the information flow within the generator based on the information flow between the original generator and discriminator.

179, TITLE: Investigating Session Search Behavior with Knowledge Graphs
https://dl.acm.org/doi/abs/10.1145/3404835.3463107
AUTHORS: Xiangsheng Li, Maarten de Rijke, Yiqun Liu, Jiaxin Mao, Weizhi Ma, Min Zhang, Shaoping Ma
HIGHLIGHT: We conduct a query log-based analysis of users' query reformulation and document clicking behavior.

180, TITLE: Is Query Performance Prediction With Multiple Query Variations Harder Than Topic Performance Prediction?
https://dl.acm.org/doi/abs/10.1145/3404835.3463039
AUTHORS: Oleg Zendel, J. Shane Culpepper, Falk Scholer
HIGHLIGHT: By generalizing the existing evaluation framework of Query Performance Prediction (QPP) we explore the causes of these differences in prediction quality in the two scenarios.

181, TITLE: Joint Learning of Deep Retrieval Model and Product Quantization based Embedding Index
https://dl.acm.org/doi/abs/10.1145/3404835.3462988
AUTHORS: Han Zhang, Hongwei Shen, Yiming Qiu, Yunjiang Jiang, Songlin Wang, Sulong Xu, Yun Xiao, Bo Long, Wen-Yun Yang
HIGHLIGHT: In this paper, we propose a novel method called Poeem, which stands for product quantization based embedding index jointly trained with deep retrieval model, to unify the two separate steps within an end-to-end training, by utilizing a few techniques including the gradient straight-through estimator, warm start strategy, optimal space decomposition and Givens rotation.

182, TITLE: Learning Passage Impacts for Inverted Indexes
https://dl.acm.org/doi/abs/10.1145/3404835.3463030
AUTHORS: Antonio Mallia, Omar Khattab, Torsten Suel, Nicola Tonellotto
HIGHLIGHT: In this paper, we propose DeepImpact, a new document term-weighting scheme suitable for efficient retrieval using a standard inverted index.

183, TITLE: Learning Robust Dense Retrieval Models from Incomplete Relevance Labels
https://dl.acm.org/doi/abs/10.1145/3404835.3463106
AUTHORS: Prafull Prakash, Julian Killingback, Hamed Zamani
HIGHLIGHT: This paper improves upon ANCE by proposing a robust negative sampling strategy for scenarios where the training data lacks complete relevance annotations.

184, TITLE: Lighter and Better: Low-Rank Decomposed Self-Attention Networks for Next-Item Recommendation
https://dl.acm.org/doi/abs/10.1145/3404835.3462978
AUTHORS: Xinyan Fan, Zheng Liu, Jianxun Lian, Wayne Xin Zhao, Xing Xie, Ji-Rong Wen
HIGHLIGHT: In this work, we propose the low-rank decomposed self-attention networks (LightSANs) to overcome these problems.

185, TITLE: Motif-aware Sequential Recommendation
https://dl.acm.org/doi/abs/10.1145/3404835.3463115
AUTHORS: Zeyu Cui, Yinjiang Cai, Shu Wu, Xibo Ma, Liang Wang
HIGHLIGHT: To address the above limitation, we propose a novel model called Motif-aware Sequential Recommendation (MoSeR), which captures the motifs hidden in behavior sequences to model the micro-structure features.

186, TITLE: Neural Representations in Hybrid Recommender Systems: Prediction versus Regularization
https://dl.acm.org/doi/abs/10.1145/3404835.3463051

AUTHORS: Ramin Raziperchikolaei, Tianyu Li, Young-joo Chung
HIGHLIGHT: In this paper, we define the neural representation for prediction (NRP) framework and apply it to the autoencoder-based recommendation systems.

187, TITLE: On the Orthogonality of Bias and Utility in Ad hoc Retrieval
https://dl.acm.org/doi/abs/10.1145/3404835.3463110
AUTHORS: Amin Bigdeli, Negar Arabzadeh, Shirin Seyedsalehi, Morteza Zihayat, Ebrahim Bagheri
HIGHLIGHT: In this paper, we empirically study this tradeoff and explore whether it would be possible to reduce bias while maintaining similar retrieval utility.

188, TITLE: Passage Retrieval for Outside-Knowledge Visual Question Answering
https://dl.acm.org/doi/abs/10.1145/3404835.3462987
AUTHORS: Chen Qu, Hamed Zamani, Liu Yang, W. Bruce Croft, Erik Learned-Miller
HIGHLIGHT: In this work, we address multi-modal information needs that contain text questions and images by focusing on passage retrieval for outside-knowledge visual question answering.

189, TITLE: Predicting Links on Wikipedia with Anchor Text Information
https://dl.acm.org/doi/abs/10.1145/3404835.3462994
AUTHORS: Robin Brochier, Frédéric Béchet
HIGHLIGHT: In this paper, we study the transductive and the inductive tasks of link prediction on several subsets of the English Wikipedia and identify some key challenges behind automatic linking based on anchor text information.

190, TITLE: Propensity-Independent Bias Recovery in Offline Learning-to-Rank Systems
https://dl.acm.org/doi/abs/10.1145/3404835.3463097
AUTHORS: Zohreh Ovaisi, Kathryn Vasilaky, Elena Zheleva
HIGHLIGHT: Here, we propose a new counterfactual method that uses a two-stage correction approach and jointly addresses selection and position bias in learning-to-rank systems without relying on propensity scores.

191, TITLE: Revisiting the Tag Relevance Prediction Problem
https://dl.acm.org/doi/abs/10.1145/3404835.3463019
AUTHORS: Denis Kotkov, Alexandr Maslov, Mats Neovius
HIGHLIGHT: In this paper, we explore the dataset from a different study, where the authors collected relevance scores on movie-tag pairs.

192, TITLE: RMBERT: News Recommendation via Recurrent Reasoning Memory Network over BERT
https://dl.acm.org/doi/abs/10.1145/3404835.3463234
AUTHORS: Qinglin Jia, Jingjie Li, Qi Zhang, Xiuqiang He, Jieming Zhu
HIGHLIGHT: In this work, we present Recurrent Reasoning Memory Network over BERT (RMBERT) for news recommendation.

193, TITLE: Robust Neural Text Classification and Entailment via Mixup Regularized Adversarial Training
https://dl.acm.org/doi/abs/10.1145/3404835.3463122
AUTHORS: Jiahao Zhao, Penghui Wei, Wenji Mao
HIGHLIGHT: To address this, we propose mixup regularized adversarial training (MRAT) against multi-level attack.

194, TITLE: Sequential Recommendation for Cold-start Users with Meta Transitional Learning
https://dl.acm.org/doi/abs/10.1145/3404835.3463089
AUTHORS: Jianling Wang, Kaize Ding, James Caverlee
HIGHLIGHT: In this work, we aim to improve sequential recommendation for cold-start users with a novel framework named MetaTL, which learns to model the transition patterns of users through meta-learning.

195, TITLE: Social Recommendation with Implicit Social Influence
https://dl.acm.org/doi/abs/10.1145/3404835.3463043
AUTHORS: Changhao Song, Bo Wang, Qinxue Jiang, Yehua Zhang, Ruifang He, Yuexian Hou
HIGHLIGHT: In this work, we concern two kinds of implicit influence: Local Implicit Influence of persons on unobserved interpersonal relations, and Global Implicit Influence of items broadcasted to users.

196, TITLE: Synthetic Target Domain Supervision for Open Retrieval QA
https://dl.acm.org/doi/abs/10.1145/3404835.3463085

AUTHORS: Revanth Gangi Reddy, Bhavani Iyer, Md Arafat Sultan, Rong Zhang, Avirup Sil, Vittorio Castelli, Radu Florian, Salim Roukos
HIGHLIGHT: In this work, we stress-test the Dense Passage Retriever (DPR)---a state-of-the-art (SOTA) open domain neural retrieval model---on closed and specialized target domains such as COVID-19, and find that it lags behind standard BM25 in this important real-world setting.

197, TITLE: Temporal Augmented Graph Neural Networks for Session-Based Recommendations
https://dl.acm.org/doi/abs/10.1145/3404835.3463112
AUTHORS: Huachi Zhou, Qiaoyu Tan, Xiao Huang, Kaixiong Zhou, Xiaoling Wang
HIGHLIGHT: To this end, we propose a memory-efficient framework - TASRec.

198, TITLE: Text-to-Text Multi-view Learning for Passage Re-ranking
https://dl.acm.org/doi/abs/10.1145/3404835.3463048
AUTHORS: Jia-Huei Ju, Jheng-Hong Yang, Chuan-Ju Wang
HIGHLIGHT: Therefore, in this work, we propose a text-to-text multi-view learning framework by incorporating an additional view---the text generation view---into a typical single-view passage ranking model.

199, TITLE: The Winner Takes it All: Geographic Imbalance and Provider (Un)fairness in Educational Recommender Systems
https://dl.acm.org/doi/abs/10.1145/3404835.3463235
AUTHORS: Elizabeth Gómez, Carlos Shui Zhang, Ludovico Boratto, Maria Salamó, Mirko Marras
HIGHLIGHT: In this paper, we consider data coming from a real-world platform and analyze the distribution of the recommendations w.r.t. the geographical provenience of the teachers.

200, TITLE: Transfer-Meta Framework for Cross-domain Recommendation to Cold-Start Users
https://dl.acm.org/doi/abs/10.1145/3404835.3463010
AUTHORS: Yongchun Zhu, Kaikai Ge, Fuzhen Zhuang, Ruobing Xie, Dongbo Xi, Xu Zhang, Leyu Lin, Qing He
HIGHLIGHT: With the advantage of meta learning which has good generalization ability to novel tasks, we propose a transfer-meta framework for CDR (TMCDR) which has a transfer stage and a meta stage.

201, TITLE: Underestimation Refinement: A General Enhancement Strategy for Exploration in Recommendation Systems
https://dl.acm.org/doi/abs/10.1145/3404835.3462983
AUTHORS: Yuhai Song, Lu Wang, Haoming Dang, Weiwei Zhou, Jing Guan, Xiwei Zhao, Changping Peng, Yongjun Bao, Jingping Shao
HIGHLIGHT: In this paper, we first benchmark state-of-the-art exploration methods in the recommendation system setting.

202, TITLE: Web Document Encoding for Structure-Aware Keyphrase Extraction
https://dl.acm.org/doi/abs/10.1145/3404835.3463067
AUTHORS: Jihyuk Kim, Young-In Song, Seung-won Hwang
HIGHLIGHT: Our key contribution is encoding Web documents to leverage structure, such as title or anchors, by building a graph of words representing both (a) position-based proximity and (b) structural relations.

203, TITLE: Adapted Graph Reasoning and Filtration for Description-Image Retrieval
https://dl.acm.org/doi/abs/10.1145/3404835.3463047
AUTHORS: Shiqian Chen, Zhiling Luo, Yingqi Gao, Wei Zhou, Chenliang Li, Haiqing Chen
HIGHLIGHT: To eliminate the mismatch, we introduce a novel problem about description-image retrieval and propose the specially designed method, named Adapted Graph Reasoning and Filtration (AGRF).

204, TITLE: Affective Dependency Graph for Sarcasm Detection
https://dl.acm.org/doi/abs/10.1145/3404835.3463061
AUTHORS: Chenwei Lou, Bin Liang, Lin Gui, Yulan He, Yixue Dang, Ruifeng Xu
HIGHLIGHT: In this paper, we revisit sarcasm detection from a novel perspective, so as to account for the long-range literal sentiment inconsistencies.

205, TITLE: Automatic Form Filling with Form-BERT
https://dl.acm.org/doi/abs/10.1145/3404835.3463063
AUTHORS: Gilad Fuchs, Haggai Roitman, Matan Mandelbrod
HIGHLIGHT: In this work, we describe Form-BERT -- a Transformer-based model which is optimized for auto-filling listing attributes given the following inputs: free-text, list of known attribute names, and zero or more attribute values.

206, TITLE: Circumstances enhanced Criminal Court View Generation
https://dl.acm.org/doi/abs/10.1145/3404835.3462984
AUTHORS: Linan Yue, Qi Liu, Han Wu, Yanqing An, Li Wang, Senchao Yuan, Dayong Wu
HIGHLIGHT: To this end, in this paper, we propose a novel Circumstances enhanced Criminal Court View Generation (C3VG) method, consisting of the extraction and generation stage.

207, TITLE: Cross Interaction Network for Natural Language Guided Video Moment Retrieval
https://dl.acm.org/doi/abs/10.1145/3404835.3463021
AUTHORS: Xinli Yu, Mohsen Malmir, Xin He, Jiangning Chen, Tong Wang, Yue Wu, Yue Liu, Yang Liu
HIGHLIGHT: We propose a self-attention together with cross interaction multi-head-attention mechanism in an early fusion scheme to capture video-query intra-dependencies as well as inter-relation from both directions (query-to-video and video-to-query).

208, TITLE: Cross-Graph Attention Enhanced Multi-Modal Correlation Learning for Fine-Grained Image-Text Retrieval
https://dl.acm.org/doi/abs/10.1145/3404835.3463031
AUTHORS: Yi He, Xin Liu, Yiu-Ming Cheung, Shu-Juan Peng, Jinhan Yi, Wentao Fan
HIGHLIGHT: Toward this end, we propose a Cross-Graph Attention model (CGAM) to explicitly learn the shared semantic concepts, which can be well utilized to guide the feature learning process of each modality and promote the common embedding learning.

209, TITLE: DCSpell: A Detector-Corrector Framework for Chinese Spelling Error Correction
https://dl.acm.org/doi/abs/10.1145/3404835.3463050
AUTHORS: Jing Li, Dafei Yin, Haozhao Wang, Yonggang Wang
HIGHLIGHT: To solve this problem, we propose a cloze-style detector-corrector framework (DCSpell) that firstly detects whether a character is erroneous before correcting it.

210, TITLE: Decoupling Representation and Regressor for Long-Tailed Information Cascade Prediction
https://dl.acm.org/doi/abs/10.1145/3404835.3463104
AUTHORS: Fan Zhou, Liu Yu, Xovee Xu, Goce Trajcevski
HIGHLIGHT: In this paper, we propose a general decoupling prediction solution -- first extracting the representation, then fine-tuning the regressor, which combines the original prediction value and weighted bias generated by a sub-network (SUB) that we designed.

211, TITLE: Deep Music Retrieval for Fine-Grained Videos by Exploiting Cross-Modal-Encoded Voice-Overs
https://dl.acm.org/doi/abs/10.1145/3404835.3462993
AUTHORS: Tingtian Li, Zixun Sun, Haoruo Zhang, Jin Li, Ziming Wu, Hui Zhan, Yipeng Yu, Hengcan Shi
HIGHLIGHT: In this paper, we also investigate the widely added voice-overs in short videos and propose a novel framework to retrieve BGM for fine-grained short videos.

212, TITLE: Deep Position-wise Interaction Network for CTR Prediction
https://dl.acm.org/doi/abs/10.1145/3404835.3463117
AUTHORS: Jianqiang Huang, Ke Hu, Qingtao Tang, Mingjian Chen, Yi Qi, Jia Cheng, Jun Lei
HIGHLIGHT: In this paper, we propose a Deep Position-wise Interaction Network (DPIN) to efficiently combine all candidate items and positions for estimating CTR at each position, achieving consistency between offline and online as well as modeling the deep non-linear interaction among position, user, context and item under the limit of serving performance.

213, TITLE: Deep User Match Network for Click-Through Rate Prediction
https://dl.acm.org/doi/abs/10.1145/3404835.3463078
AUTHORS: Zai Huang, Mingyuan Tao, Bufeng Zhang
HIGHLIGHT: To this end, in this paper, we propose a novel Deep User Match Network (DUMN) which measures the user-to-user relevance for CTR prediction.

214, TITLE: Distant Supervision based Machine Reading Comprehension for Extractive Summarization in Customer Service
https://dl.acm.org/doi/abs/10.1145/3404835.3463046
AUTHORS: Bing Ma, Cao Liu, Jingyu Wang, Shujie Hu, Fan Yang, Xunliang Cai, Guanglu Wan, Jiansong Chen, Jianxin Liao
HIGHLIGHT: In order to solve the above challenges, we propose a Distant Supervision based Machine Reading Comprehension model for extractive Summarization (DSMRC-S).

215, TITLE: Does BERT Pay Attention to Cyberbullying?
https://dl.acm.org/doi/abs/10.1145/3404835.3463029
AUTHORS: Fatma Elsafoury, Stamos Katsigiannis, Steven R. Wilson, Naeem Ramzan

HIGHLIGHT: In this work, we examine the use of BERT for cyberbullying detection on various datasets and attempt to explain its performance by analyzing its attention weights and gradient-based feature importance scores for textual and linguistic features.

216, TITLE: ECG Data Modeling and Analyzing via Deep Representation Learning and Nonparametric Hidden Markov Models
https://dl.acm.org/doi/abs/10.1145/3404835.3463044
AUTHORS: Jiaojiao Zhu, Wentao Fan
HIGHLIGHT: The purpose of this paper is to propose a novel model-based clustering approach for analyzing ECG data.

217, TITLE: Faster Index Reordering with Bipartite Graph Partitioning
https://dl.acm.org/doi/abs/10.1145/3404835.3462991
AUTHORS: Joel Mackenzie, Matthias Petri, Alistair Moffat
HIGHLIGHT: We revisit the Bipartite Graph Partitioning approach to document reordering (Dhulipala et al., KDD 2016), and consider a range of algorithmic and heuristic refinements that lead to faster computation of index-minimizing document orderings.

218, TITLE: Follow the Prophet: Accurate Online Conversion Rate Prediction in the Face of Delayed Feedback
https://dl.acm.org/doi/abs/10.1145/3404835.3463045
AUTHORS: Haoming Li, Feiyang Pan, Xiang Ao, Zhao Yang, Min Lu, Junwei Pan, Dapeng Liu, Lei Xiao, Qing He
HIGHLIGHT: In this paper, we propose to tackle the delayed feedback problem in online advertising by "Following the Prophet" (FTP for short).

219, TITLE: GAIPS: Accelerating Maximum Inner Product Search with GPU
https://dl.acm.org/doi/abs/10.1145/3404835.3462997
AUTHORS: Long Xiang, Xiao Yan, Lan Lu, Bo Tang
HIGHLIGHT: In this paper, we propose the GAIPS framework for efficient maximum inner product search (MIPS) on GPU.

220, TITLE: Generalized Zero-shot Intent Detection via Commonsense Knowledge
https://dl.acm.org/doi/abs/10.1145/3404835.3462985
AUTHORS: A.B. Siddique, Fuad Jamour, Luxun Xu, Vagelis Hristidis
HIGHLIGHT: We propose RIDE: an intent detection model that leverages commonsense knowledge in an unsupervised fashion to overcome the issue of training data scarcity.

221, TITLE: Graph-Structured Context Understanding for Knowledge-grounded Response Generation
https://dl.acm.org/doi/abs/10.1145/3404835.3463000
AUTHORS: Yanran Li, Wenjie Li, Zhitao Wang
HIGHLIGHT: In this work, we establish a context graph from both conversation utterances and external knowledge, and develop a novel graph-based encoder to better understand the conversation context.

222, TITLE: Hierarchical Dependence-aware Evaluation Measures for Conversational Search
https://dl.acm.org/doi/abs/10.1145/3404835.3463090
AUTHORS: Guglielmo Faggioli, Marco Ferrante, Nicola Ferro, Raffaele Perego, Nicola Tonellotto
HIGHLIGHT: We overcome this issue by proposing a framework for defining evaluation measures that are aware of the conversation context and the utterance semantic dependencies.

223, TITLE: Improving Response Quality with Backward Reasoning in Open-domain Dialogue Systems
https://dl.acm.org/doi/abs/10.1145/3404835.3463004
AUTHORS: Ziming Li, Julia Kiseleva, Maarten de Rijke
HIGHLIGHT: To alleviate this problem, we propose to train the generation model in a bidirectional manner by adding a backward reasoning step to the vanilla encoder-decoder training.

224, TITLE: Knowledge Based Hyperbolic Propagation
https://dl.acm.org/doi/abs/10.1145/3404835.3462980
AUTHORS: Chang-You Tai, Chien-Kun Huang, Liang-Ying Huang, Lun-Wei Ku
HIGHLIGHT: We propose a knowledge-based hyperbolic propagation framework (KBHP) which includes hyperbolic components for calculating the importance of KG attributes relative to achieve better knowledge propagation.

225, TITLE: Learning to Select Instance: Simultaneous Transfer Learning and Clustering
https://dl.acm.org/doi/abs/10.1145/3404835.3462992

AUTHORS: Zhaoxin Huan, Yulong Wang, Yong He, Xiaolu Zhang, Chilin Fu, Weichang Wu, Jun Zhou, Ke Ding, Liang Zhang, Linjian Mo
HIGHLIGHT: In this paper, we propose a novel Adaptive Clustering Transfer Learning (ACTL) method to improve transferability.

226, TITLE: LPF: A Language-Prior Feedback Objective Function for De-biased Visual Question Answering
https://dl.acm.org/doi/abs/10.1145/3404835.3462981
AUTHORS: Zujie Liang, Haifeng Hu, Jiaying Zhu
HIGHLIGHT: To address this issue, we propose a novel Language-Prior Feedback (LPF) objective function, to re-balance the proportion of each answer's loss value in the total VQA loss.

227, TITLE: LS-DST: Long and Sparse Dialogue State Tracking with Smart History Collector in Insurance Marketing
https://dl.acm.org/doi/abs/10.1145/3404835.3463058
AUTHORS: Liqiang Song, Mengqiu Yao, Ye Bi, Zhenyu Wu, Jianming Wang, Jing Xiao, Juan Wen, Xin Yu
HIGHLIGHT: To deal with these long and sparse dialogues, we propose a new dialogue state tracking architecture containing three components: dialogue encoder, Smart History Collector (SHC) and dialogue state classifier.

228, TITLE: Medical Triage Chatbot Diagnosis Improvement via Multi-relational Hyperbolic Graph Neural Network
https://dl.acm.org/doi/abs/10.1145/3404835.3463095
AUTHORS: Zheng Liu, Xiaohan Li, Zeyu You, Tao Yang, Wei Fan, Philip Yu
HIGHLIGHT: In this paper, we propose Multi-relational Hyperbolic Diagnosis Predictor (MHDP) --- a novel multi-relational hyperbolic graph neural network-based approach, to build a disease predictive model.

229, TITLE: Meta-Learned Specific Scenario Interest Network for User Preference Prediction
https://dl.acm.org/doi/abs/10.1145/3404835.3463077
AUTHORS: Yinan Sun, Kang Yin, Hehuan Liu, Si Li, Yajing Xu, Jun Guo
HIGHLIGHT: In this paper, we propose a Meta-Learned Specific Scenario Interest Network (Meta-SSIN) to predict user preference of target item by capturing specific scenario interests.

230, TITLE: On the Privacy of Federated Pipelines
https://dl.acm.org/doi/abs/10.1145/3404835.3462996
AUTHORS: Reza Nasirigerdeh, Reihaneh Torkzadehmahani, Jan Baumbach, David B. Blumenthal
HIGHLIGHT: In this paper, we draw attention to another risk associated with FL: Even if federated algorithms are individually privacy-preserving, combining them into pipelines is not necessarily privacy-preserving.

231, TITLE: On the Two-Sample Randomisation Test for IR Evaluation
https://dl.acm.org/doi/abs/10.1145/3404835.3463002
AUTHORS: Tetsuya Sakai
HIGHLIGHT: Using real runs and a test collection from the NTCIR-15 WWW-3 Task, the present study compares the properties of three two-sample significance tests for comparing two systems: Student's t-test (i.e., the classical parametric test), the Wilcoxon rank sum test (i.e., the classical nonparametric test), and the randomisation test (i.e., a population-free method that utilises modern computational power).

232, TITLE: Position Enhanced Mention Graph Attention Network for Dialogue Relation Extraction
https://dl.acm.org/doi/abs/10.1145/3404835.3463070
AUTHORS: Xinwei Long, Shuzi Niu, Yucheng Li
HIGHLIGHT: To tackle both local and speaker dependency challenges, we explicitly construct a unified mention co-occurrence graph within a local utterance window or all utterances of a speaker from different entities.

233, TITLE: Predicting Patient Readmission Risk from Medical Text via Knowledge Graph Enhanced Multiview Graph Convolution
https://dl.acm.org/doi/abs/10.1145/3404835.3463062
AUTHORS: Qiuhao Lu, Thien Huu Nguyen, Dejing Dou
HIGHLIGHT: In this paper, we propose a new method that uses medical text of Electronic Health Records (EHRs) for prediction, which provides an alternative perspective to previous studies that heavily depend on numerical and time-series features of patients.

234, TITLE: Predicting User Demography and Device from News Comments
https://dl.acm.org/doi/abs/10.1145/3404835.3463024
AUTHORS: Ohad Rozen, Joel Oren, Ariel Raviv

HIGHLIGHT: In this paper, we study predicting users' demographics based on both news browsing data and the associated user generated comments.

235, TITLE: Proactive Retrieval-based Chatbots based on Relevant Knowledge and Goals
https://dl.acm.org/doi/abs/10.1145/3404835.3463011
AUTHORS: Yutao Zhu, Jian-Yun Nie, Kun Zhou, Pan Du, Hao Jiang, Zhicheng Dou
HIGHLIGHT: In this paper, we propose a new multi-task learning framework for retrieval-based knowledge-grounded proactive dialogue.

236, TITLE: Pseudo Siamese Network for Few-shot Intent Generation
https://dl.acm.org/doi/abs/10.1145/3404835.3462995
AUTHORS: Congying Xia, Caiming Xiong, Philip Yu
HIGHLIGHT: In this paper, we propose a Pseudo Siamese Network (PSN) to generate labeled data for few-shot intents and alleviate this problem.

237, TITLE: Retrieving Implicit Information for Stock Movement Prediction
https://dl.acm.org/doi/abs/10.1145/3404835.3462999
AUTHORS: Tsun-Hsien Tang, Chung-Chi Chen, Hen-Hsen Huang, Hsin-Hsi Chen
HIGHLIGHT: We develop a neural network framework that jointly learns with a news selection mechanism to extract implicit information from the chaotic daily news pool.

238, TITLE: Retrieving Skill-Based Teams from Collaboration Networks
https://dl.acm.org/doi/abs/10.1145/3404835.3463105
AUTHORS: Radin Hamidi Rad, Ebrahim Bagheri, Mehdi Kargar, Divesh Srivastava, Jaroslaw Szlichta
HIGHLIGHT: We learn dense representations for skills and experts based on previous collaborations and bootstrap the training process through transfer learning. We also propose to fine-tune the representation of skills and experts while learning the mapping function.

239, TITLE: Rumor Detection on Social Media with Event Augmentations
https://dl.acm.org/doi/abs/10.1145/3404835.3463001
AUTHORS: Zhenyu He, Ce Li, Fan Zhou, Yi Yang
HIGHLIGHT: To address this challenge, we present a new solution, Rumor Detection on social media with Event Augmentations (RDEA), which innovatively integrates three augmentation strategies by modifying both reply attributes and event structure to extract meaningful rumor propagation patterns and to learn intrinsic representations of user engagement.

240, TITLE: Similar Trademark Detection via Semantic, Phonetic and Visual Similarity Information
https://dl.acm.org/doi/abs/10.1145/3404835.3463038
AUTHORS: Yingchi Liu, Quanzhi Li, Changlong Sun, Luo Si
HIGHLIGHT: In this study, we focus on the textual trademark in Chinese, and propose a model for finding similar trademarks for a given one.

241, TITLE: Structured Fine-Tuning of Contextual Embeddings for Effective Biomedical Retrieval
https://dl.acm.org/doi/abs/10.1145/3404835.3463075
AUTHORS: Alberto Ueda, Rodrygo L. T. Santos, Craig Macdonald, Iadh Ounis
HIGHLIGHT: In this paper, we investigate the suitability of leveraging biomedical abstract sections for fine-tuning pretrained contextual language models at a finer granularity.

242, TITLE: Towards a Better Tradeoff between Effectiveness and Efficiency in Pre-Ranking: A Learnable Feature Selection based Approach
https://dl.acm.org/doi/abs/10.1145/3404835.3462979
AUTHORS: Xu Ma, Pengjie Wang, Hui Zhao, Shaoguo Liu, Chuhan Zhao, Wei Lin, Kuang-Chih Lee, Jian Xu, Bo Zheng
HIGHLIGHT: In this paper, a novel pre-ranking approach is proposed which supports complicated models with interaction-focused architecture.

243, TITLE: Towards an Online Empathetic Chatbot with Emotion Causes
https://dl.acm.org/doi/abs/10.1145/3404835.3463042
AUTHORS: Yanran Li, Ke Li, Hongke Ning, Xiaoqiang Xia, Yalong Guo, Chen Wei, Jianwei Cui, Bin Wang
HIGHLIGHT: To gather emotion causes in online environments, we leverage counseling strategies and develop an empathetic chatbot to utilize the causal emotion information.

244, TITLE: User Feedback and Ranking in-a-Loop: Towards Self-Adaptive Dialogue Systems
https://dl.acm.org/doi/abs/10.1145/3404835.3463079
AUTHORS: Chen Shi, Yuxiang Hu, Zengming Zhang, Liang Shao, Feijun Jiang
HIGHLIGHT: In this paper, we make the first attempt to attack the problem by implementing a user feedback enhanced reranking strategy, and propose a self-adaptive dialogue system (AdaDial) for conversational AI agents.

245, TITLE: User Preference-aware Fake News Detection
https://dl.acm.org/doi/abs/10.1145/3404835.3462990
AUTHORS: Yingtong Dou, Kai Shu, Congying Xia, Philip S. Yu, Lichao Sun
HIGHLIGHT: Therefore, in this paper, we study the novel problem of exploiting user preference for fake news detection.

246, TITLE: Utility of Missing Concepts in Query-biased Summarization
https://dl.acm.org/doi/abs/10.1145/3404835.3463121
AUTHORS: Sheikh Muhammad Sarwar, Felipe Moraes, Jiepu Jiang, James Allan
HIGHLIGHT: Our study focuses on reducing user effort in finding relevant documents by exposing the information in the query that is missing in the retrieved results.

247, TITLE: Variational Autoencoders for Top-K Recommendation with Implicit Feedback
https://dl.acm.org/doi/abs/10.1145/3404835.3462986
AUTHORS: Bahare Askari, Jaroslaw Szlichta, Amirali Salehi-Abari
HIGHLIGHT: We introduce Joint Variational Autoencoder (JoVA), an ensemble of two VAEs, which jointly learns both user and item representations to predict user preferences.

248, TITLE: Vera: Prediction Techniques for Reducing Harmful Misinformation in Consumer Health Search
https://dl.acm.org/doi/abs/10.1145/3404835.3463120
AUTHORS: Ronak Pradeep, Xueguang Ma, Rodrigo Nogueira, Jimmy Lin
HIGHLIGHT: To rectify this, we propose a label prediction technique that can separate helpful from harmful content.

249, TITLE: Visual Question Rewriting for Increasing Response Rate
https://dl.acm.org/doi/abs/10.1145/3404835.3463114
AUTHORS: Jiayi Wei, Xilian Li, Yi Zhang, Xin Eric Wang
HIGHLIGHT: We developed some baseline sequence to sequence models and more advanced transformer-based models, which take a bland question and a related image as input, and output a rewritten question that's expected to be more attractive.

250, TITLE: X-2ch: Quad-Channel Collaborative Graph Network over Knowledge-Embedded Edges
https://dl.acm.org/doi/abs/10.1145/3404835.3463003
AUTHORS: Kachun Lo, Tsukasa Ishigaki
HIGHLIGHT: In this paper, we propose a quad-channel graph model (X-2ch) to tackle these problems.

251, TITLE: A Systematic Evaluation of Transfer Learning and Pseudo-labeling with BERT-based Ranking Models
https://dl.acm.org/doi/abs/10.1145/3404835.3463093
AUTHORS: Iurii Mokrii, Leonid Boytsov, Pavel Braslavski
HIGHLIGHT: We, therefore, carry out a systematic evaluation of transferability of BERT-based neural ranking models across five English datasets.

252, TITLE: Abstractive Text Summarization with Hierarchical Multi-scale Abstraction Modeling and Dynamic Memory
https://dl.acm.org/doi/abs/10.1145/3404835.3462998
AUTHORS: Lihan Wang, Min Yang, Chengming Li, Ying Shen, Ruifeng Xu
HIGHLIGHT: In this paper, we propose a novel abstractive text summarization method with hierarchical multi-scale abstraction modeling and dynamic memory (called MADY).

253, TITLE: Accelerating Neural Architecture Search for Natural Language Processing with Knowledge Distillation and Earth Mover's Distance
https://dl.acm.org/doi/abs/10.1145/3404835.3463017
AUTHORS: Jianquan Li, Xiaokang Liu, Sheng Zhang, Min Yang, Ruifeng Xu, Fengqing Qin
HIGHLIGHT: In this paper, we propose to accelerate neural architecture search for natural language processing based on knowledge distillation (called KD-NAS).

254, TITLE: Automated Graph Learning via Population Based Self-Tuning GCN
https://dl.acm.org/doi/abs/10.1145/3404835.3463056

AUTHORS: Ronghang Zhu, Zhiqiang Tao, Yaliang Li, Sheng Li
HIGHLIGHT: In this paper, we aim to automate the training of GCN models through hyperparameter optimization.

255, TITLE: AutoName: A Corpus-Based Set Naming Framework
https://dl.acm.org/doi/abs/10.1145/3404835.3463100
AUTHORS: Zhiqi Huang, Razieh Rahimi, Puxuan Yu, Jingbo Shang, James Allan
HIGHLIGHT: We propose AutoName, an unsupervised framework that extracts a name for a set of query entities from a large-scale text corpus.

256, TITLE: Backretrieval: An Image-Pivoted Evaluation Metric for Cross-Lingual Text Representations Without Parallel Corpora
https://dl.acm.org/doi/abs/10.1145/3404835.3463027
AUTHORS: Mikhail Fain, Niall Twomey, Danushka Bollegala
HIGHLIGHT: In this paper, we propose an automatic metric for evaluating the quality of cross-lingual textual representations using images as a proxy in a paired image-text evaluation dataset.

257, TITLE: Bayesian Critiquing with Keyphrase Activation Vectors for VAE-based Recommender Systems
https://dl.acm.org/doi/abs/10.1145/3404835.3463108
AUTHORS: Hojin Yang, Tianshu Shen, Scott Sanner
HIGHLIGHT: To address these deficiencies, we propose a novel Bayesian Keyphrase critiquing VAE (BK-VAE) framework that builds on the strengths of VAE-CF, but avoids the problematic second head of CE-VAE.

258, TITLE: Cheap and Good? Simple and Effective Data Augmentation for Low Resource Machine Reading
https://dl.acm.org/doi/abs/10.1145/3404835.3463099
AUTHORS: Hoang Van, Vikas Yadav, Mihai Surdeanu
HIGHLIGHT: We propose a simple and effective strategy for data augmentation for low-resource machine reading comprehension (MRC).

259, TITLE: CIFDM: Continual and Interactive Feature Distillation for Multi-Label Stream Learning
https://dl.acm.org/doi/abs/10.1145/3404835.3463096
AUTHORS: Yigong Wang, Zhuoyi Wang, Yu Lin, Latifur Khan, Dingcheng Li
HIGHLIGHT: We propose a novel continual and interactive feature distillation-based learning framework (CIFDM), to effectively classify instances with novel labels.

260, TITLE: Clustering-Based Online News Topic Detection and Tracking Through Hierarchical Bayesian Nonparametric Models
https://dl.acm.org/doi/abs/10.1145/3404835.3462982
AUTHORS: Wentao Fan, Zhiyan Guo, Nizar Bouguila, Wenjuan Hou
HIGHLIGHT: In this paper, we propose a clustering-based online news topic detection and tracking (TDT) approach based on hierarchical Bayesian nonparametric framework that allows topics to be shared across different news stories in a corpus.

261, TITLE: Communication Efficient Distributed Hypergraph Clustering
https://dl.acm.org/doi/abs/10.1145/3404835.3463092
AUTHORS: Chun Jiang Zhu, Qinqing Liu, Jinbo Bi
HIGHLIGHT: We propose an algorithm framework for distributed hypergraph clustering based on spectral hypergraph sparsification.

262, TITLE: Composite Code Sparse Autoencoders for First Stage Retrieval
https://dl.acm.org/doi/abs/10.1145/3404835.3463066
AUTHORS: Carlos Lassance, Thibault Formal, Stéphane Clinchant
HIGHLIGHT: We present a Composite Code Sparse Autoencoder (CCSA) approach for Approximate Nearest Neighbor (ANN) search of document representations based on Siamese-BERT models.

263, TITLE: ConsisRec: Enhancing GNN for Social Recommendation via Consistent Neighbor Aggregation
https://dl.acm.org/doi/abs/10.1145/3404835.3463028
AUTHORS: Liangwei Yang, Zhiwei Liu, Yingtong Dou, Jing Ma, Philip S. Yu
HIGHLIGHT: We propose to sample consistent neighbors by relating sampling probability with consistency scores between neighbors.

264, TITLE: DSGPT: Domain-Specific Generative Pre-Training of Transformers for Text Generation in E-commerce Title and Review Summarization
https://dl.acm.org/doi/abs/10.1145/3404835.3463037
AUTHORS: Xueying Zhang, Yunjiang Jiang, Yue Shang, Zhaomeng Cheng, Chi Zhang, Xiaochuan Fan, Yun Xiao, Bo Long
HIGHLIGHT: We propose a novel domain-specific generative pre-training (DSGPT) method for text generation and apply it to the product title and review summarization problems on E-commerce mobile display.

265, TITLE: Dual-View Distilled BERT for Sentence Embedding
https://dl.acm.org/doi/abs/10.1145/3404835.3463057
AUTHORS: Xingyi Cheng
HIGHLIGHT: In this paper, we propose a Dual-view distilled BERT~(DvBERT) for sentence matching with sentence embeddings.

266, TITLE: Enhanced Representation Learning for Examination Papers with Hierarchical Document Structure
https://dl.acm.org/doi/abs/10.1145/3404835.3463068
AUTHORS: Yixiao Ma, Shiwei Tong, Ye Liu, Likang Wu, Qi Liu, Enhong Chen, Wei Tong, Zi Yan
HIGHLIGHT: To this end, in this paper, we propose a novel Examination Organization Encoder (EOE) to learn a robust representation of the examination paper with the hierarchical document structure.

267, TITLE: Explicit Semantic Cross Feature Learning via Pre-trained Graph Neural Networks for CTR Prediction
https://dl.acm.org/doi/abs/10.1145/3404835.3463015
AUTHORS: Feng Li, Bencheng Yan, Qingqing Long, Pengjie Wang, Wei Lin, Jian Xu, Bo Zheng
HIGHLIGHT: In this paper, we take the first step in learning the explicit semantic cross features and propose Pre-trained Cross Feature learning Graph Neural Networks (PCF-GNN), a GNN based pre-trained model aiming at generating cross features in an explicit fashion.

268, TITLE: GemNN: Gating-enhanced Multi-task Neural Networks with Feature Interaction Learning for CTR Prediction
https://dl.acm.org/doi/abs/10.1145/3404835.3463116
AUTHORS: Hongliang Fei, Jingyuan Zhang, Xingxuan Zhou, Junhao Zhao, Xinyang Qi, Ping Li
HIGHLIGHT: In this paper, we present Baidu's recently updated CTR training framework, called Gating-enhanced Multi-task Neural Networks (GemNN).

269, TITLE: Graph Learning Regularization and Transfer Learning for Few-Shot Event Detection
https://dl.acm.org/doi/abs/10.1145/3404835.3463054
AUTHORS: Viet Dac Lai, Minh Van Nguyen, Thien Huu Nguyen, Franck Dernoncourt
HIGHLIGHT: In particular, we propose to transfer knowledge from open-domain word sense disambiguation into few-shot learning models for ED to improve their generalization to new event types.

270, TITLE: Graph Pooling via Coarsened Graph Infomax
https://dl.acm.org/doi/abs/10.1145/3404835.3463074
AUTHORS: Yunsheng Pang, Yunxiang Zhao, Dongsheng Li
HIGHLIGHT: To achieve mutual information neural maximization, we apply contrastive learning and propose a self-attention-based algorithm for learning positive and negative samples.

271, TITLE: GraphPAS: Parallel Architecture Search for Graph Neural Networks
https://dl.acm.org/doi/abs/10.1145/3404835.3463007
AUTHORS: Jiamin Chen, Jianliang Gao, Yibo Chen, Moctard Babatounde Oloulade, Tengfei Lyu, Zhao Li
HIGHLIGHT: In this paper, we propose a parallel graph architecture search (GraphPAS) framework for graph neural networks.

272, TITLE: Hierarchically Modeling Micro and Macro Behaviors via Multi-Task Learning for Conversion Rate Prediction
https://dl.acm.org/doi/abs/10.1145/3404835.3463053
AUTHORS: Hong Wen, Jing Zhang, Fuyu Lv, Wentian Bao, Tianyi Wang, Zulong Chen
HIGHLIGHT: Motivated by this observation, we propose a novel CVR prediction method by Hierarchically Modeling both Micro and Macro behaviors (HM3).

273, TITLE: Improving Bi-encoder Document Ranking Models with Two Rankers and Multi-teacher Distillation
https://dl.acm.org/doi/abs/10.1145/3404835.3463076
AUTHORS: Jaekeol Choi, Euna Jung, Jangwon Suh, Wonjong Rhee

HIGHLIGHT: In this work, we propose a method where multi-teacher distillation is applied to a cross-encoder NRM and a bi-encoder NRM to produce a bi-encoder NRM with two rankers.

274, TITLE: Improving Neural Text Style Transfer by Introducing Loss Function Sequentiality
https://dl.acm.org/doi/abs/10.1145/3404835.3463026
AUTHORS: Chinmay Rane, Gaël Dias, Alexis Lechervy, Asif Ekbal
HIGHLIGHT: In this paper, we follow the latter approach and show that the sequential introduction of different loss functions into the learning process can boost the performance of a standard model.

275, TITLE: Inductive Representation Learning in Temporal Networks via Mining Neighborhood and Community Influences
https://dl.acm.org/doi/abs/10.1145/3404835.3463052
AUTHORS: Meng Liu, Yong Liu
HIGHLIGHT: Therefore, we propose a new inductive network representation learning method called MNCI by mining neighborhood and community influences in temporal networks.

276, TITLE: KeyBLD: Selecting Key Blocks with Local Pre-ranking for Long Document Information Retrieval
https://dl.acm.org/doi/abs/10.1145/3404835.3463083
AUTHORS: Minghan Li, Eric Gaussier
HIGHLIGHT: We follow here a slightly different approach in which one first selects key blocks of a long document by local query-block pre-ranking, and then aggregates few blocks to form a short document that can be processed by a model such as BERT.

277, TITLE: Knowledge Graph Embedding via Metagraph Learning
https://dl.acm.org/doi/abs/10.1145/3404835.3463072
AUTHORS: Chanyoung Chung, Joyce Jiyoung Whang
HIGHLIGHT: In this paper, we define the metagraph of a knowledge graph by proposing a new affinity metric that measures the structural similarity between entities, and then grouping close entities by hypergraph clustering.

278, TITLE: Learning Early Exit Strategies for Additive Ranking Ensembles
https://dl.acm.org/doi/abs/10.1145/3404835.3463088
AUTHORS: Francesco Busolin, Claudio Lucchese, Franco Maria Nardini, Salvatore Orlando, Raffaele Perego, Salvatore Trani
HIGHLIGHT: We propose LEAR, a novel - learned - technique aimed to reduce the average number of trees traversed by documents to accumulate the scores, thus reducing the overall query response time.

279, TITLE: LSTPR: Graph-based Matrix Factorization with Long Short-term Preference Ranking
https://dl.acm.org/doi/abs/10.1145/3404835.3463087
AUTHORS: Chih-Hen Lee, Jun-En Ding, Chih-Ming Chen, Jing-Kai Lou, Ming-Feng Tsai, Chuan-Ju Wang
HIGHLIGHT: To address the issue, we propose LSTPR, a graph-based matrix factorization model that incorporates both high-order graph information and long short-term user preferences into the modeling process.

280, TITLE: Maximal Multipolarized Cliques Search in Signed Networks
https://dl.acm.org/doi/abs/10.1145/3404835.3463014
AUTHORS: Jie Gao, Fei Hao, Geyong Min, Zhipeng Cai
HIGHLIGHT: To conquer the limitations of the existing work, in this paper, we present a novel cohesive subgraph model based on structural clusterable theory, named maximal multipolarized clique (MMC), which can be partitioned into k polarized subcliques such that the edges in subcliques are positive and the edges between subcliques are negative.

281, TITLE: MetaP: Meta Pattern Learning for One-Shot Knowledge Graph Completion
https://dl.acm.org/doi/abs/10.1145/3404835.3463086
AUTHORS: Zhiyi Jiang, Jianliang Gao, Xinqi Lv
HIGHLIGHT: In this paper, we propose a meta pattern learning framework (MetaP) to predict new facts of relations under a challenging setting where there is only one reference for each relation.

282, TITLE: MSSM: A Multiple-level Sparse Sharing Model for Efficient Multi-Task Learning
https://dl.acm.org/doi/abs/10.1145/3404835.3463022
AUTHORS: Ke Ding, Xin Dong, Yong He, Lei Cheng, Chilin Fu, Zhaoxin Huan, Hai Li, Tan Yan, Liang Zhang, Xiaolu Zhang, Linjian Mo
HIGHLIGHT: In this paper, we design a novel architecture named the Multiple-level Sparse Sharing Model (MSSM), which can learn features selectively and share knowledge across all tasks efficiently.

283, TITLE: NIP-GCN: An Augmented Graph Convolutional Network with Node Interaction Patterns
https://dl.acm.org/doi/abs/10.1145/3404835.3463082
AUTHORS: Manish Chandra, Debasis Ganguly, Pabitra Mitra, Bithika Pal, James Thomas
HIGHLIGHT: In this paper, we propose an augmented Graph Convolutional Network (GCN) mechanism wherein additional information of local interaction patterns between a node with its neighbors (specifically, in the form of distribution of cosine similarity values of a pre-trained node vector with its neighbors) is used to enrich a node's representation prior to training a GCN.

284, TITLE: Podcast Metadata and Content: Episode Relevance and Attractiveness in Ad Hoc Search
https://dl.acm.org/doi/abs/10.1145/3404835.3463101
AUTHORS: Ben Carterette, Rosie Jones, Gareth F. Jones, Maria Eskevich, Sravana Reddy, Ann Clifton, Yongze Yu, Jussi Karlgren, Ian Soboroff
HIGHLIGHT: We describe a set of diverse podcast information needs and different approaches to assessing retrieved content for relevance.

285, TITLE: Propensity-scored Probabilistic Label Trees
https://dl.acm.org/doi/abs/10.1145/3404835.3463084
AUTHORS: Marek Wydmuch, Kalina Jasinska-Kobus, Rohit Babbar, Krzysztof Dembczynski
HIGHLIGHT: In this work, we focus on the problem of optimal predictions under this model for probabilistic label trees, a popular approach for XMLC problems.

286, TITLE: ReadsRE: Retrieval-Augmented Distantly Supervised Relation Extraction
https://dl.acm.org/doi/abs/10.1145/3404835.3463103
AUTHORS: Yue Zhang, Hongliang Fei, Ping Li
HIGHLIGHT: In this work, we propose a new paradigm named retrieval-augmented distantly supervised relation extraction (ReadsRE), which can incorporate large-scale open-domain knowledge (e.g., Wikipedia) into the retrieval step.

287, TITLE: Regularized Dual-PPMI Co-clustering for Text Data
https://dl.acm.org/doi/abs/10.1145/3404835.3463065
AUTHORS: Séverine Affeldt, Lazhar Labiod, Mohamed Nadif
HIGHLIGHT: In this paper we propose a novel co-clustering approach based on a matrix formulation of vMF model-based co-clustering.

288, TITLE: RLNF: Reinforcement Learning based Noise Filtering for Click-Through Rate Prediction
https://dl.acm.org/doi/abs/10.1145/3404835.3463012
AUTHORS: Pu Zhao, Chuan Luo, Cheng Zhou, Bo Qiao, Jiale He, Liangjie Zhang, Qingwei Lin
HIGHLIGHT: To address such serious issue, we propose a reinforcement learning based noise filtering approach, dubbed RLNF, which employs a noise filter to select effective negative samples.

289, TITLE: SDG: A Simplified and Dynamic Graph Neural Network
https://dl.acm.org/doi/abs/10.1145/3404835.3463059
AUTHORS: Dongqi Fu, Jingrui He
HIGHLIGHT: To bridge this gap, in this paper, we propose a simplified and dynamic graph neural network model, called SDG.

290, TITLE: Semantic Query Labeling Through Synthetic Query Generation
https://dl.acm.org/doi/abs/10.1145/3404835.3463071
AUTHORS: Elias Bassani, Gabriella Pasi
HIGHLIGHT: In this paper, basing on the assumption that a corpus already contains the information the users search, we propose a method for the automatic generation of semantically labeled queries and show that a semantic tagger --- based on BERT, gazetteers-based features, and Conditional Random Fields --- trained on our synthetic queries achieves results comparable to those obtained by the same model trained on real-world data.

291, TITLE: Significant Improvements over the State of the Art? A Case Study of the MS MARCO Document Ranking Leaderboard
https://dl.acm.org/doi/abs/10.1145/3404835.3463034
AUTHORS: Jimmy Lin, Daniel Campos, Nick Craswell, Bhaskar Mitra, Emine Yilmaz
HIGHLIGHT: Against the backdrop of recent IR debates on scale types, our study proposes an evaluation framework that explicitly treats certain outcomes as distinct and avoids aggregating them into a single-point metric.

292, TITLE: SPLADE: Sparse Lexical and Expansion Model for First Stage Ranking

https://dl.acm.org/doi/abs/10.1145/3404835.3463098
AUTHORS: Thibault Formal, Benjamin Piwowarski, Stéphane Clinchant
HIGHLIGHT: In this work, we present a new first-stage ranker based on explicit sparsity regularization and a log-saturation effect on term weights, leading to highly sparse representations and competitive results with respect to state-of-the-art dense and sparse methods.

293, TITLE: Stopping Criteria for Technology Assisted Reviews based on Counting Processes
https://dl.acm.org/doi/abs/10.1145/3404835.3463013
AUTHORS: Alison Sneyd, Mark Stevenson
HIGHLIGHT: This paper introduces two modifications to existing approaches: application of a Cox Process (a counting process which has not previously been used for this problem) and use of a rate function based on a power law.

294, TITLE: Targeted Attack and Defense for Deep Hashing
https://dl.acm.org/doi/abs/10.1145/3404835.3463233
AUTHORS: Xunguang Wang, Zheng Zhang, Guangming Lu, Yong Xu
HIGHLIGHT: In this paper, we propose a novel targeted attack method and the first defense scheme for deep hashing based retrieval.

295, TITLE: Understanding the Role of Affect Dimensions in Detecting Emotions from Tweets: A Multi-task Approach
https://dl.acm.org/doi/abs/10.1145/3404835.3463080
AUTHORS: Rajdeep Mukherjee, Atharva Naik, Sriyash Poddar, Soham Dasgupta, Niloy Ganguly
HIGHLIGHT: We propose VADEC, a multi-task framework that exploits the correlation between the categorical and dimensional models of emotion representation for better subjectivity analysis.

296, TITLE: Unsupervised Ensemble Learning with Noisy Label Correction
https://dl.acm.org/doi/abs/10.1145/3404835.3463081
AUTHORS: Xupeng Zou, Zhongnan Zhang, Zhen He, Liang Shi
HIGHLIGHT: This paper introduces a novel approach to improve the label accuracy based on unsupervised ensemble learning.

297, TITLE: Unsupervised Extractive Text Summarization with Distance-Augmented Sentence Graphs
https://dl.acm.org/doi/abs/10.1145/3404835.3463111
AUTHORS: Jingzhou Liu, Dominic J. D. Hughes, Yiming Yang
HIGHLIGHT: This paper proposes an unsupervised approach to extractive text summarization, which uses an automatically constructed sentence graph from each document to select salient sentences for summarization based on both the similarities and relative distances in the neighborhood of each sentences.

298, TITLE: When Choice Happens: A Systematic Examination of Mouse Movement Length for Decision Making in Web Search
https://dl.acm.org/doi/abs/10.1145/3404835.3463055
AUTHORS: Lukas Brückner, Ioannis Arapakis, Luis A. Leiva
HIGHLIGHT: We model these scenarios with recurrent neural nets and study the effect of mouse sequence padding and truncating to different lengths.

299, TITLE: Window Navigation with Adaptive Probing for Executing BlockMax WAND
https://dl.acm.org/doi/abs/10.1145/3404835.3463109
AUTHORS: Jinjin Shao, Yifan Qiao, Shiyu Ji, Tao Yang
HIGHLIGHT: This paper studies a boosting approach that further accelerates document retrieval by executing BMW, or one of its variants, on a sequence of posting windows with an order prioritized to tighten the threshold bound earlier.

300, TITLE: A Multilingual Dataset for Named Entity Recognition, Entity Linking and Stance Detection in Historical Newspapers
https://dl.acm.org/doi/abs/10.1145/3404835.3463255
AUTHORS: Ahmed Hamdi, Elvys Linhares Pontes, Emanuela Boros, Thi Tuyet Hai Nguyen, Günter Hackl, Jose G. Moreno, Antoine Doucet
HIGHLIGHT: In this paper, we introduce the development of the NewsEye resource, a multilingual dataset for named entity recognition and linking enriched with stances towards named entities.

301, TITLE: How Deep is your Learning: the DL-HARD Annotated Deep Learning Dataset
https://dl.acm.org/doi/abs/10.1145/3404835.3463262
AUTHORS: Iain Mackie, Jeffrey Dalton, Andrew Yates
HIGHLIGHT: Based on this data, we introduce a framework for identifying challenging queries.

302, TITLE: LeCaRD: A Legal Case Retrieval Dataset for Chinese Law System
https://dl.acm.org/doi/abs/10.1145/3404835.3463250
AUTHORS: Yixiao Ma, Yunqiu Shao, Yueyue Wu, Yiqun Liu, Ruizhe Zhang, Min Zhang, Shaoping Ma
HIGHLIGHT: In this paper, we construct the Chinese Legal Case Retrieval Dataset (LeCaRD), which contains 107 query cases and over 43,000 candidate cases.

303, TITLE: Morphologically Annotated Amharic Text Corpora
https://dl.acm.org/doi/abs/10.1145/3404835.3463237
AUTHORS: Tilahun Yeshambel, Josiane Mothe, Yaregal Assabie
HIGHLIGHT: This paper presents morphologically annotated Amharic lexicons as well as stem-based and root-based morphologically annotated corpora which could be used by the research community as benchmark collections either to evaluate morphological analyzers or information retrieval for Amharic.

304, TITLE: Pyserini: A Python Toolkit for Reproducible Information Retrieval Research with Sparse and Dense Representations
https://dl.acm.org/doi/abs/10.1145/3404835.3463238
AUTHORS: Jimmy Lin, Xueguang Ma, Sheng-Chieh Lin, Jheng-Hong Yang, Ronak Pradeep, Rodrigo Nogueira
HIGHLIGHT: Pyserini is a Python toolkit for reproducible information retrieval research with sparse and dense representations.

305, TITLE: REGIS: A Test Collection for Geoscientific Documents in Portuguese
https://dl.acm.org/doi/abs/10.1145/3404835.3463256
AUTHORS: Lucas Lima de Oliveira, Regis Kruel Romeu, Viviane Pereira Moreira
HIGHLIGHT: With the aim of bridging this gap, in this paper, we developed REGIS (Retrieval Evaluation for Geoscientific Information Systems), a test collection for the geoscientific domain in Portuguese.

306, TITLE: TREC Deep Learning Track: Reusable Test Collections in the Large Data Regime
https://dl.acm.org/doi/abs/10.1145/3404835.3463249
AUTHORS: Nick Craswell, Bhaskar Mitra, Emine Yilmaz, Daniel Campos, Ellen M. Voorhees, Ian Soboroff
HIGHLIGHT: This paper supports the reuse of the TREC DL test collections in three ways.

307, TITLE: WWW3E8: 259,000 Relevance Labels for Studying the Effect of Document Presentation Order for Relevance Assessors
https://dl.acm.org/doi/abs/10.1145/3404835.3463236
AUTHORS: Tetsuya Sakai, Sijie Tao, Zhaohao Zeng
HIGHLIGHT: To help researchers directly address this question using their favourite methods of analysis, we have released a large-scale data set called WWW3E8.

308, TITLE: Advancements in the Music Information Retrieval Framework AMUSE over the Last Decade
https://dl.acm.org/doi/abs/10.1145/3404835.3463252
AUTHORS: Igor Vatolkin, Philipp Ginsel, Günter Rudolph
HIGHLIGHT: We present several substantial contributions to AMUSE since its first presentation at ISMIR 2010.

309, TITLE: Conversational Entity Linking: Problem Definition and Datasets
https://dl.acm.org/doi/abs/10.1145/3404835.3463258
AUTHORS: Hideaki Joko, Faegheh Hasibi, Krisztian Balog, Arjen P. de Vries
HIGHLIGHT: In this paper, we study entity linking for conversational systems.

310, TITLE: CopyCat: Near-Duplicates Within and Between the ClueWeb and the Common Crawl
https://dl.acm.org/doi/abs/10.1145/3404835.3463246
AUTHORS: Maik Fröbe, Janek Bevendorff, Lukas Gienapp, Michael Völske, Benno Stein, Martin Potthast, Matthias Hagen
HIGHLIGHT: We introduce ChatNoir-CopyCat-21, which simplifies deduplication significantly.

311, TITLE: Elliot: A Comprehensive and Rigorous Framework for Reproducible Recommender Systems Evaluation
https://dl.acm.org/doi/abs/10.1145/3404835.3463245
AUTHORS: Vito Walter Anelli, Alejandro Bellogin, Antonio Ferrara, Daniele Malitesta, Felice Antonio Merra, Claudio Pomo, Francesco Maria Donini, Tommaso Di Noia

HIGHLIGHT: Elliot is a comprehensive recommendation framework that aims to run and reproduce an entire experimental pipeline by processing a simple configuration file.

312, TITLE: HOOPS: Human-in-the-Loop Graph Reasoning for Conversational Recommendation
https://dl.acm.org/doi/abs/10.1145/3404835.3463247
AUTHORS: Zuohui Fu, Yikun Xian, Yaxin Zhu, Shuyuan Xu, Zelong Li, Gerard de Melo, Yongfeng Zhang
HIGHLIGHT: In this work, we propose a Human-in-the-Loop (HitL) graph reasoning paradigm and develop a corresponding dataset named HOOPS for the task of KG-driven conversational recommendation.

313, TITLE: On the Quality of the TREC-COVID IR Test Collections
https://dl.acm.org/doi/abs/10.1145/3404835.3463244
AUTHORS: Ellen M. Voorhees, Kirk Roberts
HIGHLIGHT: This paper examines the quality of the resulting TREC-COVID test collections, and in doing so, offers a critique of the state-of-the-art in building reusable IR test collections.

314, TITLE: Simplified Data Wrangling with ir_datasets
https://dl.acm.org/doi/abs/10.1145/3404835.3463254
AUTHORS: Sean MacAvaney, Andrew Yates, Sergey Feldman, Doug Downey, Arman Cohan, Nazli Goharian
HIGHLIGHT: To help mitigate these challenges, we introduce a new robust and lightweight tool (ir_datasets) for acquiring, managing, and performing typical operations over datasets used in IR.

315, TITLE: Wiki-Reliability: A Large Scale Dataset for Content Reliability on Wikipedia
https://dl.acm.org/doi/abs/10.1145/3404835.3463253
AUTHORS: KayYen Wong, Miriam Redi, Diego Saez-Trumper
HIGHLIGHT: We select the 10 most popular reliability-related templates on Wikipedia, and propose an effective method to label almost 1M samples of Wikipedia article revisions as positive or negative with respect to each template.

316, TITLE: WIT: Wikipedia-based Image Text Dataset for Multimodal Multilingual Machine Learning
https://dl.acm.org/doi/abs/10.1145/3404835.3463257
AUTHORS: Krishna Srinivasan, Karthik Raman, Jiecao Chen, Michael Bendersky, Marc Najork
HIGHLIGHT: In this paper, we introduce the Wikipedia-based Image Text (WIT) Dataset to better facilitate multimodal, multilingual learning.

317, TITLE: A Test Collection for Ad-hoc Dataset Retrieval
https://dl.acm.org/doi/abs/10.1145/3404835.3463261
AUTHORS: Makoto P. Kato, Hiroaki Ohshima, Ying-Hsang Liu, Hsin-Liang Chen
HIGHLIGHT: This paper introduces a new test collection for ad-hoc dataset retrieval, which have been developed through a shared task called Data Search in the fifteenth NTCIR.

318, TITLE: Booking.com Multi-Destination Trips Dataset
https://dl.acm.org/doi/abs/10.1145/3404835.3463240
AUTHORS: Dmitri Goldenberg, Pavel Levin
HIGHLIGHT: We introduce a novel dataset of real multi-destination trips booked through Booking.com's online travel platform.

319, TITLE: EXTRA: Explanation Ranking Datasets for Explainable Recommendation
https://dl.acm.org/doi/abs/10.1145/3404835.3463248
AUTHORS: Lei Li, Yongfeng Zhang, Li Chen
HIGHLIGHT: To achieve a standard way of evaluating recommendation explanations, we provide three benchmark datasets for EXplanaTion RAnking (denoted as EXTRA), on which explainability can be measured by ranking-oriented metrics.

320, TITLE: Pchatbot: A Large-Scale Dataset for Personalized Chatbot
https://dl.acm.org/doi/abs/10.1145/3404835.3463239
AUTHORS: Hongjin Qian, Xiaohe Li, Hanxun Zhong, Yu Guo, Yueyuan Ma, Yutao Zhu, Zhanliang Liu, Zhicheng Dou, Ji-Rong Wen
HIGHLIGHT: In this paper, we introduce Pchatbot, a large-scale dialogue dataset that contains two subsets collected from Weibo and Judicial forums respectively.

321, TITLE: POINTREC: A Test Collection for Narrative-driven Point of Interest Recommendation
https://dl.acm.org/doi/abs/10.1145/3404835.3463243

AUTHORS: Jafar Afzali, Aleksander Mark Drzewiecki, Krisztian Balog
HIGHLIGHT: This paper presents a test collection for contextual point of interest (POI) recommendation in a narrative-driven scenario.

322, TITLE: Seer-Dock: A General-Purpose Dockerized Scholarly Document Collection and Management Framework
https://dl.acm.org/doi/abs/10.1145/3404835.3463251
AUTHORS: Dina Sayed, Mohamed Nour, Heiko Schuldt
HIGHLIGHT: In this work, we introduce Seer-Dock, a novel and easy-to deploy general-purpose dockerized framework to build a scholarly document harvesting and management system.

323, TITLE: Select, Substitute, Search: A New Benchmark for Knowledge-Augmented Visual Question Answering
https://dl.acm.org/doi/abs/10.1145/3404835.3463259
AUTHORS: Aman Jain, Mayank Kothyari, Vishwajeet Kumar, Preethi Jyothi, Ganesh Ramakrishnan, Soumen Chakrabarti
HIGHLIGHT: In response, we identify a key structural idiom in OKVQA ,viz., S3 (select, substitute and search), and build a new data set and challenge around it.

324, TITLE: Simulating User Satisfaction for the Evaluation of Task-oriented Dialogue Systems
https://dl.acm.org/doi/abs/10.1145/3404835.3463241
AUTHORS: Weiwei Sun, Shuo Zhang, Krisztian Balog, Zhaochun Ren, Pengjie Ren, Zhumin Chen, Maarten de Rijke
HIGHLIGHT: To help build a human-like user simulator that can measure the quality of a dialogue, we propose the following task: simulating user satisfaction for the evaluation of task-oriented dialogue systems.

325, TITLE: TripClick: The Log Files of a Large Health Web Search Engine
https://dl.acm.org/doi/abs/10.1145/3404835.3463242
AUTHORS: Navid Rekabsaz, Oleg Lesota, Markus Schedl, Jon Brassey, Carsten Eickhoff
HIGHLIGHT: We release a large-scale domain-specific dataset of click logs, obtained from user interactions of the Trip Database health web search engine.

326, TITLE: WTR: A Test Collection for Web Table Retrieval
https://dl.acm.org/doi/abs/10.1145/3404835.3463260
AUTHORS: Zhiyu Chen, Shuo Zhang, Brian D. Davison
HIGHLIGHT: We describe the development, characteristics and availability of a test collection for the task of Web table retrieval, which uses a large-scale Web Table Corpora extracted from the Common Crawl.

327, TITLE: Chatty Goose: A Python Framework for Conversational Search
https://dl.acm.org/doi/abs/10.1145/3404835.3462782
AUTHORS: Edwin Zhang, Sheng-Chieh Lin, Jheng-Hong Yang, Ronak Pradeep, Rodrigo Nogueira, Jimmy Lin
HIGHLIGHT: Our aim is to lower the barrier of entry for research in conversational search by providing reproducible baselines that researchers can build on top of.

328, TITLE: DarkJargon.net: A Platform for Understanding Underground Conversation with Latent Meaning
https://dl.acm.org/doi/abs/10.1145/3404835.3462801
AUTHORS: Dominic Seyler, Wei Liu, Yunan Zhang, XiaoFeng Wang, ChengXiang Zhai
HIGHLIGHT: We present a novel online platform that caters to the understating of underground conversation with latent meaning.

329, TITLE: OpenMatch: An Open Source Library for Neu-IR Research
https://dl.acm.org/doi/abs/10.1145/3404835.3462789
AUTHORS: Zhenghao Liu, Kaitao Zhang, Chenyan Xiong, Zhiyuan Liu, Maosong Sun
HIGHLIGHT: OpenMatch is a Python-based library that serves for Neural Information Retrieval (Neu-IR) research.

330, TITLE: Precision Medicine Search for Paediatric Oncology
https://dl.acm.org/doi/abs/10.1145/3404835.3462792
AUTHORS: Bevan Koopman, Tracey Wright, Natacha Omer, Veronica McCabe, Guido Zuccon
HIGHLIGHT: We present a search engine aimed to help clinicians find targeted treatments for children with cancer.

331, TITLE: PYA0: A Python Toolkit for Accessible Math-Aware Search
https://dl.acm.org/doi/abs/10.1145/3404835.3462794
AUTHORS: Wei Zhong, Jimmy Lin

HIGHLIGHT: In this paper, we present PyA0, an easy-to-use Python toolkit built on Approach Zero that improves its accessibility to researchers.

332, TITLE: QuARk: A GUI for Quality-Aware Ranking of Arguments
https://dl.acm.org/doi/abs/10.1145/3404835.3462795
AUTHORS: Markus Nilles, Lorik Dumani, Ralf Schenkel
HIGHLIGHT: In this paper we present QuARk, a GUI that allows users to retrieve arguments from a focused debate collection for their queries.

333, TITLE: The Information Retrieval Anthology
https://dl.acm.org/doi/abs/10.1145/3404835.3462798
AUTHORS: Martin Potthast, Sebastian Günther, Janek Bevendorff, Jan Philipp Bittner, Alexander Bondarenko, Maik Fröbe, Christian Kahmann, Andreas Niekler, Michael Völske, Benno Stein, Matthias Hagen
HIGHLIGHT: We present the IR Anthology, a corpus of information retrieval publications accessible via a metadata browser and a full-text search engine.

334, TITLE: A Web-based Knowledge Hub for Exploration of Multiple Research Article Collections
https://dl.acm.org/doi/abs/10.1145/3404835.3462780
AUTHORS: Wei Emma Zhang, Miao Liu, Alan Pallath, Gokul Tamilventhan
HIGHLIGHT: In this work, we build an online knowledge hub (http://covid19knowledgehub.herokuapp.com/) particularly for Covid-19 related research articles per the requirement from researchers in a hospital.

335, TITLE: FedNLP: An Interpretable NLP System to Decode Federal Reserve Communications
https://dl.acm.org/doi/abs/10.1145/3404835.3462785
AUTHORS: Jean Lee, Hoyoul Luis Youn, Nicholas Stevens, Josiah Poon, Soyeon Caren Han
HIGHLIGHT: In this paper, we present FedNLP, an interpretable multi-component Natural Language Processing (NLP) system to decode Federal Reserve communications.

336, TITLE: GeoWINE: Geolocation based Wiki, Image, News and Event Retrieval
https://dl.acm.org/doi/abs/10.1145/3404835.3462786
AUTHORS: Golsa Tahmasebzadeh, Endri Kacupaj, Eric Müller-Budack, Sherzod Hakimov, Jens Lehmann, Ralph Ewerth
HIGHLIGHT: In this paper, we present the GeoWINE (Geolocation-based Wiki-Image-News-Event retrieval) demonstrator, an effective modular system for multimodal retrieval which expects only a single image as input.

337, TITLE: OrgBox: Supporting Cognitive and Metacognitive Activities During Exploratory Search
https://dl.acm.org/doi/abs/10.1145/3404835.3462790
AUTHORS: Austin R. Ward, Robert Capra
HIGHLIGHT: In this paper, we describe the features and implementation of the OrgBox tool.

338, TITLE: QuTI! Quantifying Text-Image Consistency in Multimodal Documents
https://dl.acm.org/doi/abs/10.1145/3404835.3462796
AUTHORS: Matthias Springstein, Eric Müller-Budack, Ralph Ewerth
HIGHLIGHT: In this paper, we present a web-based demo application that automatically quantifies the cross-modal relations of entities~(persons, locations, and events) in image and text.

339, TITLE: Towards Trustworthiness in the Context of Explainable Search
https://dl.acm.org/doi/abs/10.1145/3404835.3462799
AUTHORS: Sayantan Polley, Rashmi Raju Koparde, Akshaya Bindu Gowri, Maneendra Perera, Andreas Nuernberger
HIGHLIGHT: We present an Explainable Search system with a focus on evaluating the XAI aspect of Trustworthiness along with the retrieval performance.

340, TITLE: YASBIL: Yet Another Search Behaviour (and) Interaction Logger
https://dl.acm.org/doi/abs/10.1145/3404835.3462800
AUTHORS: Nilavra Bhattacharya, Jacek Gwizdka
HIGHLIGHT: We present YASBIL, a two-component logging solution comprising a browser extension and a WordPress plugin.

341, TITLE: Big Brother: A Drop-In Website Interaction Logging Service
https://dl.acm.org/doi/abs/10.1145/3404835.3462781

AUTHORS: Harrisen Scells, Jimmy, Guido Zuccon
HIGHLIGHT: We present a generic, application-independent service for logging interactions in web-pages, specifically targetting user studies.

342, TITLE: DiffIR: Exploring Differences in Ranking Models' Behavior
https://dl.acm.org/doi/abs/10.1145/3404835.3462784
AUTHORS: Kevin Martin Jose, Thong Nguyen, Sean MacAvaney, Jeffrey Dalton, Andrew Yates
HIGHLIGHT: DiffIR is a new open-source web tool to assist with qualitative ranking analysis by visually 'diffing' system rankings at the individual result level for queries where behavior significantly diverges.

343, TITLE: Interacting with Information in Immersive Virtual Environments
https://dl.acm.org/doi/abs/10.1145/3404835.3462787
AUTHORS: Austin R. Ward, Yiyin Gu, Sandeep Avula, Praneeth Chakravarthula
HIGHLIGHT: In this paper, we demonstrate the Information Interactions in Virtual Reality (IIVR) system designed and implemented to study how users interact with abstract information objects in immersive virtual environments in the context of information retrieval.

344, TITLE: News2PubMed: A Browser Extension for Linking Health News to Medical Literature
https://dl.acm.org/doi/abs/10.1145/3404835.3462788
AUTHORS: Jun Wang, Bei Yu
HIGHLIGHT: This demo system presents a browser extension that allows the reader of a health news article to quickly retrieve related medical/health research papers.

345, TITLE: PECAN: A Platform for Searching Chat Conversations
https://dl.acm.org/doi/abs/10.1145/3404835.3462791
AUTHORS: Kunpeng Qin, Harrisen Scells, Guido Zuccon
HIGHLIGHT: In this paper, we introduce a new task for addressing this problem, called searching for conversations, whereby the aim is to retrieve and rank groups of related messages given a search query.

346, TITLE: Privacy-Aware Remote Information Retrieval User Experiments Logging Tool
https://dl.acm.org/doi/abs/10.1145/3404835.3462793
AUTHORS: Hanyu Li, Hongyu Lu, Songhao Huang, Weizhi Ma, Min Zhang, Yiqun Liu, Shaoping Ma
HIGHLIGHT: In this work, we propose a Privacy-Aware Remote User Logging Tool for remotely collecting user behaviors and explicit experience feedback, with a special care for user privacy.

347, TITLE: Science2Cure: A Clinical Trial Search Prototype
https://dl.acm.org/doi/abs/10.1145/3404835.3462797
AUTHORS: Maciej Rybinski, Sarvnaz Karimi, Aleney Khoo
HIGHLIGHT: We present a search system that given a patient profile searches over clinical trials for potential matches.

348, TITLE: Learning with Little Data: Industry Challenges and Innovations
https://dl.acm.org/doi/abs/10.1145/3404835.3464925
AUTHORS: Nikhil Rao
HIGHLIGHT: There are two challenges in collecting human annotated data. First, the human annotation process does not scale and it is hard to obtain large volumes of annotations in multiple languages. Second, annotators must query existing systems to obtain samples for auditing, resulting in very few mismatched examples (data skewness) and counterfactual biases. In this talk, we address these challenges using two recent advances in deep learning.

349, TITLE: Restoring Healthy Online Discourse by Detecting and Reducing Controversy, Misinformation, and Toxicity Online
https://dl.acm.org/doi/abs/10.1145/3404835.3464926
AUTHORS: Shiri Dori-Hacohen, Keen Sung, Jengyu Chou, Julian Lustig-Gonzalez
HIGHLIGHT: In this position paper, we argue that both detecting online information disorders and deploying novel, real-world content moderation tools is crucial in promoting empathy in social networks, and maintaining free expression and discourse.

350, TITLE: From Producer Success to Retention: A New Role of Search and Recommendation Systems on Marketplaces
https://dl.acm.org/doi/abs/10.1145/3404835.3464924
AUTHORS: Viet Ha-Thuc, Matthew Wood, Yunli Liu, Jagadeesan Sundaresan
HIGHLIGHT: In this talk, we discuss how these systems will need to evolve from the traditional formulations by incorporating the producer value into their objectives.

351, TITLE: Putting the Role of Personalization into Context
https://dl.acm.org/doi/abs/10.1145/3404835.3464929
AUTHORS: Dmitri Goldenberg
HIGHLIGHT: This talk focuses on examining the role of recommenders and their ability to adapt to customer feedback.

352, TITLE: SearchGCN: Powering Embedding Retrieval by Graph Convolution Networks for E-Commerce Search
https://dl.acm.org/doi/abs/10.1145/3404835.3464927
AUTHORS: Xinlin Xia, Shang Wang, Han Zhang, Songlin Wang, Sulong Xu, Yun Xiao, Bo Long, Wen-Yun Yang
HIGHLIGHT: In this proposal, we introduce our approach, namely SearchGCN, for embedding-based candidate retrieval in one of the largest e-commerce search engine in the world.

353, TITLE: AliMe Avatar: Multi-modal Content Production and Presentation for Live-streaming E-commerce
https://dl.acm.org/doi/abs/10.1145/3404835.3464922
AUTHORS: Feng-Lin Li, Zhongzhou Zhao, Qin Lu, Xuming Lin, Hehong Chen, Bo Chen, Liming Pu, Jiashuo Zhang, Fu Sun, Xikai Liu, Liqun Xie, Qi Huang, Ji Zhang, Haiqing Chen
HIGHLIGHT: In this paper, we mainly focus on the product broadcasting part, demonstrate the system, present the underlying techniques, and share our experience in dealing with live-streaming E-commerce.

354, TITLE: AliMe DA: A Data Augmentation Framework for Question Answering in Cold-start Scenarios
https://dl.acm.org/doi/abs/10.1145/3404835.3464923
AUTHORS: Guohai Xu, Yan Shao, Chenliang Li, Feng-Lin Li, Bin Bi, Ji Zhang, Haiqing Chen
HIGHLIGHT: In this paper, we propose AliMe DA, a practical data augmentation (DA) framework that consists of data production, denoising and consumption, to alleviate this problem.

355, TITLE: AI Based Information Retrieval System for Identifying Harmful Online Gaming Patterns
https://dl.acm.org/doi/abs/10.1145/3404835.3464921
AUTHORS: Deepanshi Seth, Rukma Talwadker, Tridib Mukherjee, Usama Chitapure, Nagesh Adiga, Avantika Gupta
HIGHLIGHT: In this proposal, we present an automated, data driven, AI powered, Responsible Game Play (RGP) framework cum tool which has been integrated in our online skill gaming platform.

356, TITLE: Transformer-based Banking Products Recommender System
https://dl.acm.org/doi/abs/10.1145/3404835.3464928
AUTHORS: Davide Liu, George Philippe Farajalla, Alexandre Boulenger
HIGHLIGHT: We propose a modeling framework for item recommendation using a Transformer encoder [6] and a novel input data representation accounting for the temporal context of item ownership and user metadata.