

Monday 23rd October 2023

08:30am - 9:00am - Affinity 2
Opening (Hybrid)

9:00am - 10:00am - Affinity 2
Keynote 1 (Hybrid) -- Chirag Shah: Generative AI and the Future of Information Access

Refreshment Break - Affinity 1
10:00am - 10:30am

Session 1 - 10:30am - 12:30pm

Session 1A - Recommendation 1 - Affinity 2

Chair - Mounia Lalmas

10:30am - 10:45am

CDR: Conservative Doubly Robust Learning for Debiased Recommendation by Zijie Song, Jiawei Chen, Sheng Zhou, Qihao Shi, Yan Feng, Chun Chen and Can Wang

10:45am - 11:00am

Decentralized Graph Neural Network for Privacy-Preserving Recommendation by Xiaolin Zheng, Zhongyu Wang, Chaochao Chen, Jiashu Qian and Yao Yang

11:00am - 11:15am

Federated News Recommendation with Fine-grained Interpolation and Dynamic Clustering by Sanshi Lei Yu, Qi Liu, Fei Wang, Yang Yu and Enhong Chen

11:15am - 11:30am

G-STO: Sequential Main Shopping Intention Detection via Graph-Regularized Stochastic Transformer by Yuchen Zhuang, Xin

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Shen, Yan Zhao, Chaosheng Dong, Ming Wang, Jin Li and Chao Zhang

11:30am - 11:45am

Graph Enhanced Hierarchical Reinforcement Learning for Goal-oriented Learning Path Recommendation by Qingyao Li, Wei Xia, Li'Ang Yin, Jian Shen, Renting Rui, Weinan Zhang, Xianyu Chen, Ruiming Tang and Yong Yu

11:45am - 12:00pm

Post-hoc Selection of Pareto-Optimal Solutions in Search and Recommendation by Vincenzo Paparella, Vito Walter Anelli, Franco Maria Nardini, Raffaele Perego and Tommaso Di Noia

12:00pm - 12:15pm

Scalable Neural Contextual Bandit for Recommender Systems by Zheqing Zhu and Benjamin Van Roy

12:15pm - 12:30pm

Towards Communication-Efficient Model Updating for On-Device Session-Based Recommendation by Xin Xia, Junliang Yu, Guandong Xu and Hongzhi Yin

Session 1B - CTR & Ads I - Belmont 1

Chair - Fanny Ye, University of Notre Dame

10:30am - 10:45am

Combating ad fatigue via frequency-recency features in online advertising systems by Natalia Silberstein, Or Shoham and Assaf Klein

10:45am - 11:00am

Masked Multi-Domain Network: Multi-Type and Multi-Scenario Conversion Rate Prediction with a Single Model by Wentao Ouyang, Xiuwu Zhang, Chaofeng Guo, Shukui Ren, Yupei Sui, Kun Zhang, Jinmei Luo, Yunfeng Chen, Dongbo Xu, Xiangzheng Liu and Yanlong Du

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11:00am - 11:15am

MEBS: Multi-task End-to-end Bid Shading for Multi-slot Display Advertising by Zhen Gong, Lvyin Niu, Yang Zhao, Miao Xu, Zhenzhe Zheng, Haoqi Zhang, Zhilin Zhang, Fan Wu, Rongquan Bai, Chuan Yu, Jian Xu and Bo Zheng

11:15am - 11:30am

Practice on Effectively Extracting NLP Features for Click-Through Rate Prediction by Hao Yang, Ziliang Wang, Weijie Bian, Zhefeng Sun and Yifan Zeng

11:30am - 11:45am

Dynamic Group Parameter Modeling for Click-Through-Rate Prediction by Xuan Ma, Jian Wang, Zhiyuan Chen, Zehua Zhang, Jie He, Changping Peng, Zhangang Lin and Jingping Shao

11:45am - 12:00pm

DFFM: Domain Facilitated Feature Modeling for CTR Prediction by Xuan Ma, Jian Wang, Zhiyuan Chen, Zehua Zhang, Jie He, Changping Peng, Zhangang Lin and Jingping Shao

12:00pm - 12:15pm

Entire Space Cascade Delayed Feedback Modeling for Effective Conversion Rate Prediction by Yunfeng Zhao, Xu Yan, Xiaoqiang Gui, Shuguang Han, Xiang-Rong Sheng, Guoxian Yu, Jufeng Chen, Zhao Xu and Bo Zheng

12:15pm - 12:30pm

Rec4Ad: A Free Lunch to Mitigate Sample Selection Bias for Ads CTR Prediction in Taobao by Jingyue Gao, Shuguang Han, Han Zhu, Siran Yang, Yuning Jiang, Jian Xu and Bo Zheng

Session 1C - Graphs - Belmont 2

10:30am - 10:45am

Voucher Abuse Detection with Prompt-based Fine-tuning on Graph Neural Networks by Zhihao Wen, Yuan Fang, Yihan Liu, Yang Guo and Shuji Hao

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10:45am - 11:00am

Graph Learning for Exploratory Query Suggestions in an Instant Search System by Enrico Palumbo, Andreas Damianou, Alice Wang, Alva Liu, Ghazal Fazelnia, Francesco Fabbri, Rui Ferreira, Fabrizio Silvestri, Hugues Bouchard, Claudia Hauff, Mounia Lalmas, Ben Carterette, Praveen Chandar and David Nyhan

11:00am - 11:15am

FAF: A Risk Detection Framework on Industry-Scale Graphs by Yice Luo, Guannan Wang, Yongchao Liu, Jiaxin Yue, Weihong Cheng and Binjie Fei

11:15am - 11:30am

Dual Interests-Aligned Graph Auto-Encoders for Cross-domain Recommendation in WeChat by Yice Luo, Guannan Wang, Yongchao Liu, Jiaxin Yue, Weihong Cheng and Binjie Fei

11:30am - 11:45am

Enhancing Catalog Relationship Problems with Heterogeneous Graphs and Graph Neural by Boxin Du, Rob Barton, Grant Galloway, Junzhou Huang, Shioulin Sam, Ismail Tutar and Changhe Yuan Networks Distillation

11:45am - 12:00pm

GBTTE: Graph Attention Network Based Bus Travel Time Estimation by Boxin Du, Rob Barton, Grant Galloway, Junzhou Huang, Shioulin Sam, Ismail Tutar and Changhe Yuan

12:00pm - 12:15pm

Logistics Audience Expansion via Temporal Knowledge Graph by Hua Yan, Yingqiang Ge, Haotian Wang, Desheng Zhang and Yu Yang

12:15pm - 12:30pm

Multi-gate Mixture-of-Contrastive-Experts with Graph-based Gating Mechanism for TV by Cong Zhang, Dongyang Liu, Lin Zuo, Junlan Feng, Chao Deng, Jian Sun, Haitao Zeng and Yaohong Zhao Recommendation

Session 1D - Interpretability 1 - Belmont 3

Monday 23rd October 2023

Chair - Jiaoyan Chen

10:30am - 10:45am

A Model-Agnostic Method to Interpret Link Prediction Evaluation of Knowledge Graph Embeddings by Narayanan Asuri Krishnan and Carlos R. Rivero

10:45am - 11:00am

Attacking Neural Networks with Neural Networks: Towards Deep Synchronization for Backdoor Attacks by Zihan Guan, Lichao Sun, Mengnan Du and Ninghao Liu

11:00am - 11:15am

CANDY: A Causality-Driven Model for Hotel Dynamic Pricing by Ruitao Zhu, Wendong Xiao, Yao Yu, Yizhi Yu, Zhenzhe Zheng, Ke Bu, Dong Li and Fan Wu

11:15am - 11:30am

Causality-guided Graph Learning for Session-based Recommendation by Dianer Yu, Qian Li, Hongzhi Yin and Guandong Xu

11:30am - 11:45am

Contrastive Counterfactual Learning for Causality-aware Interpretable Recommender Systems by Guanglin Zhou, Chengkai Huang, Xiaocong Chen, Xiwei Xu, Chen Wang, Liming Zhu and Lina Yao

11:45am - 12:00pm

KG4Ex: A Knowledge Graph-Based Approach for Exercise Recommendation by Quanlong Guan, Fang Xiao, Xinghe Cheng, Liangda Fang, Ziliang Chen, Guanliang Chen and Weiqi Luo

12:00pm - 12:15pm

Rule-based Knowledge Graph Completion with Canonical Models by Simon Ott, Patrick Betz, Daria Stepanova, Mohamed H. Gad-Elrab, Christian Meilicke and Heiner Stuckenschmidt

12:15pm - 12:30pm

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Towards Deeper, Lighter and Interpretable Cross Network for CTR Prediction by Fangye Wang, Hansu Gu, Dongsheng Li, Tun Lu, Peng Zhang and Ning Gu

Session 1E - Urban Informatics 1 - Meeting Room 2

Chair - Reynold Cheng, University of Hong Kong

10:30am - 10:45am

Timestamps as Prompts for Geography-Aware Location Recommendation by Yan Luo, Haoyi Duan, Ye Liu and Fu-Lai Chung

10:45am - 11:00am

CARPG: Cross-City Knowledge Transfer for Traffic Accident Prediction via Attentive Region-level Parameter Generation by Guang Yang, Yuequn Zhang, Jinqun Hang, Xinyue Feng, Zejun Xie, Desheng Zhang and Yu Yang

11:00am - 11:15am

CLSPRec: Contrastive Learning of Long and Short-term Preferences for Next POI Recommendation by Chenghua Duan, Wei Fan, Wei Zhou, Hu Liu and Junhao Wen

11:15am - 11:30am

Cross-city Few-Shot Traffic Forecasting via Traffic Pattern Bank by Zhanyu Liu, Guanjie Zheng and Yanwei Yu

11:30am - 11:45am

Cross-Scenario Maneuver Decision with Adaptive Perception for Autonomous Driving by Yuan Fu, Shuncheng Liu, Yuyang Xia, Fangda Guo and Kai Zheng

11:45am - 12:00pm

HST-GT:Heterogeneous Spatial-Temporal Graph Transformer for Delivery Time Estimation in Warehouse-Distribution Integration E-Commerce by Xiaohui Zhao, Shuai Wang, Hai Wang, Tian He, Desheng Zhang and Guang Wang

12:00pm - 12:15pm

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MLPST: MLP is All You Need for Spatio-Temporal Prediction by Zijian Zhang, Ze Huang, Zhiwei Hu, Xiangyu Zhao, Wanyu Wang, Zitao Liu, Junbo Zhang, S. Joe Qin and Hongwei Zhao

12:15pm - 12:30pm

Target-Oriented Maneuver Decision for Autonomous Vehicle: A Rule-Aided Reinforcement Learning Framework by Ximu Zeng, Quanlin Yu, Shuncheng Liu, Yuyang Xia, Han Su and Kai Zheng

Session 1F - Graph Learning 1 - Ashtead 1

Chair - Trung Kien Tran

10:30am - 10:45am

AKE-GNN: Effective Graph Learning with Adaptive Knowledge Exchange by Liang Zeng, Jin Xu, Zijun Yao, Yanqiao Zhu and Jian Li

10:45am - 11:00am

Contrastive Representation Learning Based on Multiple Node-centered Subgraphs by Dong Li, Wenjun Wang, Minglai Shao and Chen Zhao

11:00am - 11:15am

DPGN: Denoising Periodic Graph Network for Life Service Recommendation by Hao Xu, Huixuan Chi, Danyang Liu, Sheng Zhou and Mengdi Zhang

11:15am - 11:30am

DYANE: DYnamic Attributed NEtwork Generative Model by Giselle Zeno and Jennifer Neville

11:30am - 11:45am

GraphFADE: Field-aware Decorrelation Neural Network for Graphs with Tabular Features by Junhong Wan, Yao Fu, Junlan Yu, Weihao Jiang, Shiliang Pu and Ruiheng Yang

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11:45am - 12:00pm

How Expressive are Graph Neural Networks in Recommendation? by Xuheng Cai, Lianghao Xia, Xubin Ren and Chao Huang

12:00pm - 12:15pm

Time-aware Graph Structure Learning via Sequence Prediction on Temporal Graphs by Haozhen Zhang, Xueting Han, Xi Xiao and Jing Bai

12:15pm - 12:30pm

A Multi-Modality Framework for Drug-Drug Interaction Prediction by Harnessing Multi-source Data by Qianlong Wen, Jiazheng Li, Chuxu Zhang and Yanfang Ye

Session 1G - Natural Language 1 - Ashtead 2

Chair - Nishanth Sastry

10:30am - 10:45am

Diving into a Sea of Opinions: Multi-modal Abstractive Summarization with Comment Sensitivity by Raghvendra Kumar, Ratul Chakraborty, Abhishek Tiwari, Sriparna Saha and Naveen Saini

10:45am - 11:00am

GranCATs: Cross-lingual Enhancement through Granularity-Specific Contrastive Adapters by Meizhen Liu, Jiakai He, Xu Guo, Jianye Chen, Siu Cheung Hui and Fengyu Zhou

11:00am - 11:15am

Inducing Causal Structure for Abstractive Text Summarization by Lu Chen, Ruqing Zhang, Wei Huang, Wei Chen, Jiafeng Guo and Xueqi Cheng

11:15am - 11:30am

James ate 5 oranges = Steve bought 5 pencils: Structure-Aware Denoising for Paraphrasing Word Problems by Rishabh Gupta, Venkatesh V, Mukesh Mohania and Vikram Goyal

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11:30am - 11:45am

NOVO: A Dual-Learnable and Interpretable Identifier for Model-Based IR by Zihan Wang, Yujia Zhou, Yiteng Tu and Zhicheng Dou

11:45am - 12:00pm

Rethinking Sentiment Analysis under Uncertainty by Yuefei Wu, Bin Shi, Jiarun Chen, Yuhang Liu, Bo Dong, Qinghua Zheng and Hua Wei

12:00pm - 12:15pm

Sentiment-aware Review Summarization with Personalized Multi-task Fine-tuning by Hongyan Xu, Hongtao Liu, Zhepeng Lv, Qing Yang and Wenjun Wang

Session 1H - Search - Ashtead 3

Chair - Negin Rahimi

10:30am - 10:45am

Black-box Adversarial Attacks against Dense Retrieval Models: A Multi-view Contrastive Learning Method by Yu-An Liu, Ruqing Zhang, Jiafeng Guo, Maarten de Rijke, Wei Chen, Yixing Fan and Xueqi Cheng

10:45am - 11:00am

Continual Learning for Generative Retrieval over Dynamic Corpora by Jianguo Chen, Ruqing Zhang, Jiafeng Guo, Maarten de Rijke, Wei Chen, Yixing Fan and Xueqi Cheng

11:00am - 11:15am

I³ Retriever: Incorporating Implicit Interaction in Pre-trained Language Models for Passage Retrieval by Qian Dong, Yiding Liu, Qingyao Ai, Haitao Li, Shuaiqiang Wang, Yiqun Liu, Dawei Yin and Shaoping Ma

11:15am - 11:30am

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L²R: Lifelong Learning for First-stage Retrieval with Backward-Compatible Representations by Yinqiong Cai, Keping Bi, Yixing Fan, Jiafeng Guo, Wei Chen and Xueqi Cheng

11:30am - 11:45am

LambdaRank Gradients are Incoherent by Federico Marcuzzi, Claudio Lucchese and Salvatore Orlando

11:45am - 12:00pm

Replace Scoring with Arrangement: A Contextual Set-to-Arrangement Framework for Learning-to-Rank by Jiarui Jin, Xianyu Chen, Weinan Zhang, Mengyue Yang, Yang Wang, Yali Du, Yong Yu and Jun Wang

12:00pm - 12:15pm

Search Result Diversification Using Query Aspects as Bottlenecks by Puxuan Yu, Negin Rahimi, Zhiqi Huang and James Allan

12:15pm - 12:30pm

VILE: Block-Aware Visual Enhanced Document Retrieval by Huaying Yuan, Zhicheng Dou, Yujia Zhou, Yu Guo and Jirong Wen

Lunch Break and Posters/ Demos - Affinity 1

12:30pm - 2:00pm

Session 2 - 2:00pm - 4:00pm

Session 2A - Recommendation 2 - Affinity 2

2:00pm - 2:15pm

AdaMCT: Adaptive Mixture of CNN-Transformer for Sequential Recommendation by Juyong Jiang, Peiyan Zhang, Yingtao Luo, Chaozhuo Li, Jaeboum Kim, Kai Zhang, Senzhang Wang, Xing Xie and Sunghun Kim

2:15pm - 2:30pm

AutoSeqRec: Autoencoder for Efficient Sequential Recommendation by Sijia Liu, Jiahao Liu, Hansu Gu, Dongsheng Li, Tun Lu,

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Peng Zhang and Ning Gu

2:30pm - 2:45pm

Deep Generative Imputation Model for Missing Not At Random Data by Jialei Chen, Yuanbo Xu, Pengyang Wang and Yongjian Yang

2:45pm - 3:00pm

Diffusion Augmentation for Sequential Recommendation by Qidong Liu, Fan Yan, Xiangyu Zhao, Zhaocheng Du, Huifeng Guo, Ruiming Tang and Feng Tian

3:00pm - 3:15pm

Dual-view Contrastive Learning for Auction Recommendation by Danni Ren, Leong Hou U and Wei Liu

3:15pm - 3:30pm

Self-supervised Contrastive Enhancement with Symmetric Few-shot Learning Towers for Cold-start News Recommendation by Hao Jiang, Chuanzhen Li, Juanjuan Cai, Runyu Tian and Jingling Wang

3:30pm - 3:45pm

Sequential Recommendation via an Adaptive Cross-Domain Knowledge Decomposition by Chuang Zhao, Xinyu Li, Ming He, Hongke Zhao and Jianping Fan

3:45pm - 4:00pm

UniTE: A Unified Treatment Effect Estimation Method for One-Sided and Two-Sided Marketing by Runshi Liu and Zhipeng Hou

Session 2B - Recommender Systems - Belmont 1

2:00pm - 2:15pm

Multitask Ranking System for Immersive Feed and No MoreClicks: A Case Study of Short-Form Video Recommendation by Qingyun Liu, Zhe Zhao, Liang Liu, Zhen Zhang, Junjie Shan, Yuening Li, Shuchao Bi, Lichan Hong and Ed Chi

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2:15pm - 2:30pm

Graph Exploration Matters: Improving both individual-level and system-level diversity in WeChat Feed Recommendation by Shuai Yang, Lixin Zhang, Feng Xia and Leyu Lin

2:30pm - 2:45pm

Leveraging Watch-time Feedback for Short-Video Recommendations: A Causal Labeling Framework by Yang Zhang, Yimeng Bai, Jianxin Chang, Xiaoxue Zang, Song Lu, Jing Lu, Fuli Feng, Yanan Niu and Yang Song

2:45pm - 3:00pm

3MN: Three Meta Networks for Multi-Scenario and Multi-Task Learning in Online Advertising Recommender Systems by Yifei Zhang, Hua Hua, Hui Guo, Shuangyang Wang, Chongyu Zhong and Shijie Zhang

3:00pm - 3:15pm

SHARK: A Lightweight Model Compression Approach for Large-scale Recommender Systems by Yifei Zhang, Hua Hua, Hui Guo, Shuangyang Wang, Chongyu Zhong and Shijie Zhang

3:15pm - 3:30pm

Popularity-aware Distributionally Robust Optimization for Recommendation System by Jujia Zhao, Wenjie Wang, Xinyu Lin, Leigang Qu, Jizhi Zhang and Tat-Seng Chua

3:30pm - 3:45pm

BOLT: An Automated Deep Learning Framework for Training and Deploying Large-Scale Search and Recommendation Models on Commodity CPU Hardware by Vihan Lakshman, Nicholas Meisburger, Benito Geordie, David Torres Ramos, Joshua Engels, Pratik Pranav, Benjamin Coleman, Benjamin Meisburger, Shubh Gupta, Yashwanth Adunukota, Tharun Medini and Anshumali Shrivastava

3:45pm - 4:00pm

An Incremental Update Framework for Online Recommenders with Data-Driven Prior by Chen Yang, Jin Chen, Xiangdong Wu, Qian Yu, Kui Ma, Zihao Zhao, Zhiwei Fang, Wenlong Chen, Chaosheng Fan, Jie He, Changping Peng, Zhangang Lin and Jingping Shao

Monday 23rd October 2023

Session 2C - Forecasting / Time Series / Spatio-temporal - Belmont 2

2:00pm - 2:15pm

Continual Learning in Predictive Autoscaling by Hongyan Hao, Zhixuan Chu, Shiyi Zhu, Gangwei Jiang, Yan Wang, Caigao Jiang, James Zhang, Wei Jiang, Siqiao Xue and Jun Zhou

2:15pm - 2:30pm

Nowcast-to-Forecast: Token-Based Multiple Remote Sensing Data Fusion for Precipitation Forecast by Hongyan Hao, Zhixuan Chu, Shiyi Zhu, Gangwei Jiang, Yan Wang, Caigao Jiang, James Zhang, Wei Jiang, Siqiao Xue and Jun Zhou

2:30pm - 2:45pm

Generating Product Insights from Community Q&A by Lital Kuchy, Ran Levy, Avihai Mejer, Noam Segev, Shunit Agmon and Miriam Farber

2:45pm - 3:00pm

TrendSpotter: Forecasting E-commerce Product Trends by Gayatri Ryali, Shreyas S, Sivaramakrishnan Kaveri and Prakash Mandayam Comar

3:00pm - 3:15pm

DeepSTA: A Spatial-Temporal Attention Network for Logistics Delivery Timely Rate Prediction in Anomaly Conditions by Jinhui Yi, Huan Yan, Haotian Wang, Jian Yuan and Yong Li

3:15pm - 3:30pm

STREAMS: Towards Spatio-Temporal Causal Discovery with Reinforcement Learning for Streamflow Rate Prediction by Paras Sheth, Ahmadreza Mosallanezhad, Kaize Ding, Reepal Shah, John Sabo, Huan Liu and K. Selçuk Candan

3:30pm - 3:45pm

Monotonic Neural Ordinary Differential Equation: Time-series Forecasting for Cumulative Data by Zhichao Chen, Leilei Ding, Hao Wang, Zhixuan Chu, Yucheng Qi and Jianmin Huang

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3:45pm - 4:00pm

Climate Intervention Analysis using AI Model Guided by Statistical Physics Principles by Sookyung Kim, Kalai Ramea, Salva Rühling Cachay, Haruki Hirasawa, Subhashis Hazarika, Dipti Hingmire, Peetak Mitra, Philip J. Rasch and Hansi Singh

Session 2D - Sequence Modelling 1 - Belmont 3

Chair - Xu Guo, NTU

2:00pm - 2:15pm

A Co-training Approach for Noisy Time Series Learning by Weiqi Zhang, Jianfeng Zhang, Jia Li and Fugee Tsung

2:15pm - 2:30pm

Bi-channel Multiple Sparse Graph Attention Networks for Session-based Recommendation by Shutong Qiao, Wei Zhou, Junhao Wen, Hongyu Zhang and Min Gao

2:30pm - 2:45pm

FATA-Trans: Field and Time-Aware Transformer for Sequential Tabular Data by Dongyu Zhang, Liang Wang, Xin Dai, Shubham Jain, Junpeng Wang, Yujie Fan, Chin-Chia Michael Yeh, Yan Zheng, Zhongfang Zhuang and Wei Zhang

2:45pm - 3:00pm

Non-Compliant Bandits by Branislav Kveton, Yi Liu, Matteo Kruijssen and Yisu Nie

3:00pm - 3:15pm

RLIFE: Remaining Lifespan Prediction for E-scooters by Shuxin Zhong, William Yubeaton, Wenjun Lyu, Guang Wang, Desheng Zhang and Yu Yang

3:15pm - 3:30pm

Spatial-temporal Graph Boosting Network: Enhancing Spatial-temporal Graph Neural Networks via Gradient Boosting by Yujie Fan, Chin-Chia Michael Yeh, Huiyuan Chen, Yan Zheng, Liang Wang, Junpeng Wang, Xin Dai, Zhongfang Zhuang and Wei

Monday 23rd October 2023

Zhang

3:30pm - 3:45pm

Unleashing the Power of Shared Label Structures for Human Activity Recognition by Xiyuan Zhang, Ranak Roy Chowdhury, Jiayun Zhang, Dezhi Hong, Rajesh Gupta and Jingbo Shang

Session 2E - Graph Learning 2 - Meeting Room 2

Chair - Anthony Colas, University of Florida

2:00pm - 2:15pm

Causality and Independence Enhancement for Biased Node Classification by Guoxin Chen, Yongqing Wang, Fangda Guo, Qinglang Guo, Jiangli Shao, Huawei Shen and Xueqi Cheng

2:15pm - 2:30pm

Cognitive-inspired Graph Redundancy Networks for Multi-source Information Fusion by Yao Fu, Junhong Wan, Junlan Yu, Weihao Jiang and Shiliang Pu

2:30pm - 2:45pm

Learning Node Abnormality with Weak Supervision by Qinghai Zhou, Kaize Ding, Huan Liu and Hanghang Tong

2:45pm - 3:00pm

Liberate Pseudo Labels from Over-Dependence: Label Information Migration on Sparsely Labeled Graphs by Zihui Hu, Yao Fu, Hong Zhao, Xiaoyu Cai, Weihao Jiang and Shiliang Pu

3:00pm - 3:15pm

Low-bit Quantization for Deep Graph Neural Networks with Smoothness-aware Message Propagation by Shuang Wang, Bahaeddin Eravci, Rustam Guliyev and Hakan Ferhatosmanoglu

3:15pm - 3:30pm

Monday 23rd October 2023

Modeling Sequential Collaborative User Behaviors for Seller-aware Next Basket Recommendation by Ziyi Kou, Saurav Manchanda, Shih-Ting Lin, Min Xie, Haixun Wang and Xiangliang Zhang

3:30pm - 3:45pm

On the Trade-off between Over-smoothing and Over-squashing in Deep Graph Neural Networks by Jhony H. Giraldo, Konstantinos Skianis, Thierry Bouwmans and Fragkiskos Malliaros

3:45pm - 4:00pm

Robust Graph Clustering via Meta Weighting for Noisy Graphs by Hyeonsoo Jo, Fanchen Bu and Kijung Shin

Session 2F - Knowledge Discovery - Ashtead 1

Chair - Bo Xiong

2:00pm - 2:15pm

A Momentum Loss Reweighting Method for Improving Recall by Chenzhi Jiang, Ningtao Wang, Ruofan Wu, Yin Jin, Xing Fu and Weiqiang Wang

2:15pm - 2:30pm

CLOCK: Online Temporal Hierarchical Framework for Multi-scale Multi-granularity Forecasting of User Impression by Xiaoyu Wang, Yonghui Guo, Xiaoyang Ma, Dongbo Huang, Lan Xu, Haisheng Tan, Hao Zhou and Xiang-Yang Li

2:30pm - 2:45pm

Delivery Optimized Discovery in Behavioral User Segmentation under Budget Constraint by Harshita Chopra, Atanu R Sinha, Sunav Choudhary, Ryan A Rossi, Paavan Indela, Veda Pranav Parwatala, Srinjayee Paul and Aурghya Maiti

2:45pm - 3:00pm

Foreseer: Product Aspect Forecasting Using Temporal Graph Embedding by Zixuan Liu, Gaurush Hiranandani, Kun Qian, Edward W Huang, Yi Xu, Belinda Zeng, Karthik Subbian and Sheng Wang

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3:00pm - 3:15pm

Incremental Graph Classification by Class Prototype Construction and Augmentation by Yixin Ren, Li Ke, Dong Li, Hui Xue, Zhao Li and Shuigeng Zhou

3:15pm - 3:30pm

Quantifying the Effectiveness of Advertising: A Bootstrap Proportion Test for Brand Lift Testing by Wanjun Liu, Xiufan Yu, Jialiang Mao, Xiaoxu Wu and Justin Dyer

3:30pm - 3:45pm

Understanding and Modeling Collision Avoidance Behavior for Realistic Crowd Simulation by Zihan Yu, Guozhen Zhang, Yong Li and Depeng Jin

Session 2G - Interpretability 2 - Ashtead 2

Chair - Stefan Heindorf

2:00pm - 2:15pm

ACGAN-GNNExplainer: Auxiliary Conditional Generative Explainer for Graph Neural Networks by Yiqiao Li, Jianlong Zhou, Yifei Dong and Fang Chen

2:15pm - 2:30pm

Concept Evolution in Deep Learning Training: A Unified Interpretation Framework and Discoveries by Haekyu Park, Seongmin Lee, Benjamin Hoover, Austin Wright, Omar Shaikh, Rahul Duggal, Nilaksh Das, Kevin Li, Judy Hoffman and Duen Horng Chau

2:30pm - 2:45pm

Deep Integrated Explanations by Oren Barkan, Yehonatan Elisha, Yuval Asher, Amit Eshel, Jonathan Weil and Noam Koenigstein

2:45pm - 3:00pm

FINRule: Feature Interactive Neural Rule Learning by Lu Yu, Meng Li, Ya-Lin Zhang, Longfei Li and Jun Zhou

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3:00pm - 3:15pm

Flexible and Robust Counterfactual Explanations with Minimal Satisfiable Perturbations by Yongjie Wang, Hangwei Qian, Yongjie Liu, Wei Guo and Chunyan Miao

3:15pm - 3:30pm

Heterogeneous Temporal Graph Neural Network Explainer by Jiazheng Li, Chunhui Zhang and Chuxu Zhang

3:30pm - 3:45pm

PriSHAP: Prior-guided Shapley Value Explanations for Correlated Features by Guanyu Jiang, Fuzhen Zhuang, Bowen Song, Tianyi Zhang and Deqing Wang

3:45pm - 4:00pm

RoCourseNet: Distributionally Robust Training of a Prediction Aware Recourse Model by Hangzhi Guo, Feiran Jia, Jinghui Chen, Anna Squicciarini and Amulya Yadav

Session 2H - Privacy and Security 1 - Ashtead 3

Chair - Simon S. Woo, Sungkyunkwan University

2:00pm - 2:15pm

Closed-form Machine Unlearning for Matrix Factorization by Shuijing Zhang, Jian Lou, Li Xiong, Xiaoyu Zhang and Jing Liu

2:15pm - 2:30pm

GUARD: Graph Universal Adversarial Defense by Jintang Li, Jie Liao, Ruofan Wu, Liang Chen, Zibin Zheng, Jiawang Dan, Changhua Meng and Weiqiang Wang

2:30pm - 2:45pm

Independent Distribution Regularization for Private Graph Embedding by Qi Hu and Yangqiu Song

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2:45pm - 3:00pm

Non-Uniform Adversarial Perturbations for Discrete Tabular Datasets by Jay Nandy, Jatin Chauhan, Rishi Saket and Aravindan Raghuv eer

3:00pm - 3:15pm

Online Efficient Secure Logistic Regression based on Function Secret Sharing by Jing Liu, Jamie Cui and Cen Chen

3:15pm - 3:30pm

Towards Dynamic and Reliable Private Key Management for Hierarchical Access Structure in Decentralized Storage by Yifang Zhang, Mingyue Wang, Yu Guo and Fangda Guo

3:30pm - 3:45pm

Transferable Structure-based Adversarial Attack of Heterogeneous Graph Neural Network by Yu Shang, Yudong Zhang, Jiansheng Chen, Depeng Jin and Yong Li

Refreshment Break - Affinity 1

4:00pm - 4:30pm

Session 3 - 4:30pm - 5:30pm

Session 3A - Knowledge Discovery and Retrieval - Affinity 2

4:30pm - 4:45pm

Ontology Enrichment from Texts: A Biomedical Dataset for Concept Discovery and Placement by Hang Dong, Jiaoyan Chen, Yuan He and Ian Horrocks

4:45pm - 5:00pm

GOAL: A Challenging Knowledge-grounded Video Captioning Benchmark for Real-time Soccer Commentary Generation by Ji Qi, Jifan Yu, Teng Tu, Kunyu Gao, Yifan Xu, Xinyu Guan, Xiaozhi Wang, Bin Xu, Lei Hou, Juanzi Li and Jie Tang

Monday 23rd October 2023

5:00pm - 5:15pm

Towards Filling the Gap in Conversational Search: From Passage Retrieval to Conversational Response Generation by Weronika Łajewska and Krisztian Balog

5:15pm - 5:30pm

Anserini Gets Dense Retrieval: Integration of Lucene's HNSW Indexes by Xueguang Ma, Tommaso Teofili and Jimmy Lin

Session 3B - Users & Behaviour - Belmont 1

4:30pm - 4:45pm

Robust User Behavioral Sequence Representation via Multi-scale Stochastic Distribution Prediction by Chilin Fu, Weichang Wu, Xiaolu Zhang, Jun Hu, Jing Wang and Jun Zhou

4:45pm - 5:00pm

Beyond Semantics: Learning a Behavior Augmented Relevance Model with Self-supervised Learning by Zeyuan Chen, Wei Chen, Jia Xu, Zhongyi Liu and Wei Zhang

5:00pm - 5:15pm

PS-SA: An Efficient Self-Attention via Progressive Sampling for User Behavior Sequence Modeling by Jiachen Hu, Zhangming Chan, Yu Zhang, Shuguang Han, Siyuan Lou, Baolin Liu, Han Zhu, Yuning Jiang, Jian Xu and Bo Zheng

5:15pm - 5:30pm

RUEL: Retrieval-Augmented User Representation with Edge Browser Logs for Sequential Recommendation by Ning Wu, Ming Gong, Linjun Shou, Jian Pei and Daxin Jiang

Session 3C - Transfer Learning 1 - Belmont 2

Monday 23rd October 2023

Chair - Biao Yin, WPI

4:30pm - 4:45pm

Adaptation Speed Analysis for Fairness-aware Causal Models by Yujie Lin, Chen Zhao, Minglai Shao, Xujiang Zhao and Haifeng Chen

4:45pm - 5:00pm

Few-Shot Learning via Task-Aware Discriminant Local Descriptors Network by Leilei Yan, Fanzhang Li, Xiaohan Zheng and Li Zhang

5:00pm - 5:15pm

Improving Adversarial Transferability via Frequency-Based Stationary Point Search by Zhiyu Zhu, Huaming Chen, Jiayu Zhang, Xinyi Wang, Zhibo Jin, Qinghua Lu, Jun Shen and Kim-Kwang Raymond Choo

5:15pm - 5:30pm

Knowledge-Aware Cross-Semantic Alignment for Domain-Level Zero-Shot Recommendation by Junji Jiang, Hongke Zhao, Ming He, Likang Wu, Kai Zhang and Jianping Fan

Session 3D - Computer Vision 1 - Belmont 3

Chair - Preben Ness, Simula Research Laboratory

4:30pm - 4:45pm

Hierarchical Multi-Label Classification with Partial Labels and Unknown Hierarchy by Suhyeon Jo, Donghyeok Shin, Byeonghu Na, JoonHo Jang and Il-Chul Moon

4:45pm - 5:00pm

Optimal Linear Subspace Search: Learning to Construct Fast and High-Quality Schedulers for Diffusion Models by Zhongjie Duan, Chengyu Wang, Cen Chen, Jun Huang and Weining Qian

Monday 23rd October 2023

5:00pm - 5:15pm

PCT-CycleGAN: Paired Complementary Temporal Cycle-Consistent Adversarial Networks for Radar-Based Precipitation Nowcasting by Jaeho Choi, Yura Kim, Kwang-Ho Kim, Sung-Hwa Jung and Ikhyun Cho

5:15pm - 5:30pm

STAMINA (Spatial-Temporal Aligned Meteorological INformation Attention) and FPL (Focal Precip Loss): Advancements in Precipitation Nowcasting for Heavy Rainfall Events by Ping-Chia Huang, Yueh-Li Chen, Yi-Syuan Liou, Bing-Chen Tsai, Chun-Chieh Wu and Winston H. Hsu

Session 3E - - User Modelling 1 - Meeting Room 2

Chair - Yao Zhang, Amazon Alexa AI

4:30pm - 4:45pm

Continuous Personalized Knowledge Tracing: Modeling Long-Term Learning in Online Environments by Chunpai Wang and Shaghayegh Sahebi

4:45pm - 5:00pm

Simulating Student Interactions with Two-stage Imitation Learning for Intelligent Educational Systems by Guanhao Zhao, Zhenya Huang, Yan Zhuang, Jiayu Liu, Qi Liu, Zhiding Liu, Jinze Wu and Enhong Chen

5:00pm - 5:15pm

The Role of Unattributed Behavior Logs in Predictive User Segmentation by Atanu R Sinha, Harshita Chopra, Aurghya Maiti, Atishay Ganesh, Sarthak Kapoor, Saily Myana, Saurabh Mahapatra

5:15pm - 5:30pm

Understanding User Immersion in Online Short Video Interaction by Zhiyu He, Shaorun Zhang, Peijie Sun, Jiayu Li, Xiaohui Xie, Min Zhang and Yiqun Liu

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Session 3F - Knowledge Representation 1 - Ashtead 1

Chair - Ingo Frommholz

4:30pm - 4:45pm

A two-tier shared embedding method for review-based recommender systems by Zhen Yang, Junrui Liu, Tong Li, Di Wu, Shiqiu Yang and Huan Liu

4:45pm - 5:00pm

Combining Inductive and Deductive Reasoning for Query Answering over Incomplete Knowledge Graphs by Medina Andresel, Daria Stepanova, Kien Tran, Csaba Domokos and Pasquale Minervini

5:00pm - 5:15pm

Disentangled Interest importance aware Knowledge Graph Neural Network for Fund Recommendation by Ke Tu, Wei Qu, Zhengwei Wu, Zhiqiang Zhang, Zhongyi Liu, Yiming Zhao, Le Wu, Jun Zhou and Guannan Zhang

5:15pm - 5:30pm

Reveal the Unknown: Out-of-Knowledge-Base Mention Discovery with Entity Linking by Hang Dong, Jiaoyan Chen, Yuan He, Yinan Liu and Ian Horrocks

Session 3G - Sequence Modelling 2 - Ashtead 2

Chair - Christine Bauer, Paris Lodron University Salzburg

4:30pm - 4:45pm

Muffin: Music Recommender System via Shuffle Invariant Training by Yunhak Oh, Sukwon Yun, Dongmin Hyun, Sein Kim and

Monday 23rd October 2023

Chanyoung Park

4:45pm - 5:00pm

Periodicity May Be Emanative: Hierarchical Contrastive Learning for Sequential Recommendation by Changxin Tian, Binbin Hu, Wayne Xin Zhao, Zhiqiang Zhang and Jun Zhou

5:00pm - 5:15pm

TPUF: Enhancing Cross-domain Sequential Recommendation via Transferring Pre-trained User Features by Yujia Ding, Huan Li, Ke Chen and Lidan Shou

5:15pm - 5:30pm

Weak Regression Enhanced Lifelong Learning for Improved Performance and Reduced Training Data by Tong Liu, Xulong Wang, He Huang and Po Yang

Session 3H - Recommendation 3 - Ashtead 3

Chair - Rodrygo Santos

4:30pm - 4:45pm

Adaptive Multi-Modalities Fusion in Sequential Recommendation Systems by Hengchang Hu, Wei Guo, Yong Liu and Min-Yen Kan

4:45pm - 5:00pm

Batch-Mix Negative Sampling for Learning Recommendation Retrievers by Yongfu Fan, Jin Chen, Yongquan Jiang, Defu Lian, Fangda Guo and Kai Zheng

5:00pm - 5:15pm

Dimension Independent Mixup for Hard Negative Sample in Collaborative Filtering by Xi Wu, Liangwei Yang, Jibing Gong, Chao Zhou, Tianyu Lin, Xiaolong Liu and Philip S. Yu

Monday 23rd October 2023

5:15pm - 5:30pm

printf: Preference Modeling Based on User Reviews with Item Images and Textual Information via Graph Learning by Hao Lun Lin, Jyun Yu Jiang, Pu Jen Cheng and Ming Hao Juan

Poster/ Demo - Affinity 1

5:30pm - 7:15pm

End of Day 1 - 7:15pm