

Tuesday, August 6th, 2019

10:00AM - 12:00PM

Applied Data Science Track Session ADS1: Auto-ML and Development Frameworks, Summit 1, Ground Level, Egan Center

Chair: Gabor Melli (Sony PlayStation)

Auto-Keras: An Efficient Neural Architecture Search System

Haifeng Jin (Texas A&M University); Qingquan Song (Texas A&M University); Xia Hu (Texas A&M University)

Pythia: AI-assisted Code Completion System

Alexey Svyatkovskiy (Microsoft); Ying Zhao (Microsoft); Shengyu Fu (Microsoft); Neel Sundaresan (Microsoft)

TF-Ranking: Scalable TensorFlow Library for Learning-to-Rank

Rama Kumar Pasumarthi (Google); Sebastian Bruch (Google); Xuanhui Wang (Google); Cheng Li (Google); Michael Bendersky (Google); Marc Najork (Google); Jan Pfeifer (Google); Nadav Golbandi (Google); Rohan Anil (Google); Stephan Wolf (Google)

Shrinkage Estimators in Online Experiments

Drew Dimmery (Facebook); Eytan Bakshy (Facebook); Jasjeet Sekhon (University of California, Berkeley)

FDML: A Collaborative Machine Learning Framework for Distributed Features

Yaochen Hu (University of Alberta); Di Niu (University of Alberta); Jianming Yang (Tencent); Shengping Zhou (Tencent)

Research Track Session RT1: Neural Networks, Summit 2, Ground Level, Egan Center

Chair: Nesreen Ahmed

Estimating Node Importance in Knowledge Graphs Using Graph Neural Networks

Namyong Park (Carnegie Mellon University & Amazon); Andrey Kan (Amazon); Xin Luna Dong (Amazon); Tong Zhao (Amazon); Christos Faloutsos (Carnegie Mellon University & Amazon)

Certifiable Robustness and Robust Training for Graph Convolutional Networks

Daniel Zügner (Technical University of Munich); Stephan Günnemann (Technical University of Munich)

Effective and Efficient Sports Play Retrieval with Deep Representation Learning

Zheng Wang (Nanyang Technological University); Cheng Long (Nanyang Technological University); Gao Cong (Nanyang Technological University); Ce Ju (Intelligent Driving Group, Baidu Inc.)

Multiple Relational Attention Network for Multi-task Learning

Jiejie Zhao (Beihang University); Bowen Du (Beihang University); Leilei Sun (Beihang University); Fuzhen Zhuang (University of Chinese Academy of Sciences); Weifeng Lv (Beihang University); Hui Xiong (Rutgers University)

The Impact of Person-Organization Fit on Talent Management: A Structure-Aware Convolutional Neural Network Approach

Ying Sun (Institute of Computing Technology, CAS, Baidu Talent Intelligence Center, Baidu Inc., University of Chinese Academy of Sciences); Fuzhen Zhuang (Institute of Computing Technology, CAS & University of Chinese Academy of Sciences); Hengshu Zhu (Baidu Talent Intelligence Center, Baidu Inc.); Xin Song (Baidu Talent Intelligence Center, Baidu Inc.); Qing He (Institute of Computing Technology, CAS & University of Chinese Academy of Sciences); Hui Xiong (Baidu Talent Intelligence Center, Baidu Inc. & Business Intelligence Lab, Baidu Research)

CoSTCo: A Neural Tensor Completion Model for Sparse Tensors

Hanpeng Liu (University of Southern California); Yaguang Li (University of Southern California); Michael Tsang (University of Southern California); Yan Liu (University of Southern California)

Research Track Session RT2: Analyzing Sequential and Temporal Data, Summit 3, Ground Level, Egan Center

Chair: Manuel Gomez Rodriguez

Deep Landscape Forecasting for Real-time Bidding Advertising

Kan Ren (Shanghai Jiao Tong University); Jiarui Qin (Shanghai Jiao Tong University); Lei Zheng (Shanghai Jiao Tong University); Zhengyu Yang (Shanghai Jiao Tong University); Weinan Zhang (Shanghai Jiao Tong University); Yong Yu (Shanghai Jiao Tong University)

Predicting Path Failure In Time-Evolving Graphs

Jia Li (The Chinese University of Hong Kong); Zhichao Han (The Chinese University of Hong Kong); Hong Cheng (The Chinese University of Hong Kong); Jiao Su (The Chinese University of Hong Kong); Pengyun Wang (Noah's Ark Lab, Huawei Technologies); Jianfeng Zhang (Noah's Ark Lab, Huawei Technologies); Lujia Pan (Noah's Ark Lab, Huawei Technologies)

Pairwise Comparisons with Flexible Time-Dynamics

Lucas Maystre (Spotify); Victor Kristof (EPFL); Matthias Grossglauser (EPFL)

Modeling Extreme Events in Time Series Prediction

Daizong Ding (Fudan University); Mi Zhang (Fudan University); Xudong Pan (Fudan University); Min Yang (Fudan University); Xiangnan He (University of Science and Technology of China)

Adversarial Substructured Representation Learning for Mobile User Profiling

Pengyang Wang (Missouri University of Science and Technology); Yanjie Fu (Missouri University of Science and Technology); Hui Xiong (Rutgers University); Xiaolin li (Nanjing University)

Research Track Session RT3: Algorithmic Techniques, Summit 4, Ground Level, Egan Center

Chair: Lingfei Wu

Paper Matching with Local Fairness Constraints

Ari Kobren (University of Massachusetts Amherst); Barna Saha (University of Massachusetts Amherst); Andrew McCallum (University of Massachusetts Amherst)

A Memory-Efficient Sketch Method for Estimating High Similarities in Streaming Sets

Pinghui Wang (Xi'an Jiaotong University); Yiyang Qi (Xi'an Jiaotong University); Yuanming Zhang (Xi'an Jiaotong University); Qiaozhu Zhai (Xi'an Jiaotong University); Chenxu Wang (Xi'an Jiaotong University);

John C.S. Lui (The Chinese University of Hong Kong); Xiaohong Guan (Xi'an Jiaotong University & Tsinghua University)

Revisiting kd-tree for Nearest Neighbor Search

Parikshit Ram (IBM Research AI); Kaushik Sinha (Wichita State University)

Adversarially Robust Submodular Maximization under Knapsack Constraints

Dmitrii Avdiukhin (Indiana University); Slobodan Mitrovic (Massachusetts Institute of Technology); Grigory Yaroslavtsev (Indiana University); Samson Zhou (Indiana University)

MinJoin: Efficient Edit Similarity Joins via Local Hash Minima

Haoyu Zhang (Indiana University Bloomington); Qin Zhang (Indiana University Bloomington)

Coresets for Minimum Enclosing Balls over Sliding Windows

Yanhao Wang (National University of Singapore); Yuchen Li (Singapore Management University); Kian-Lee Tan (National University of Singapore)

1:30PM - 3:30PM

Applied Data Science Track Session ADS2: Language Models and Text Mining, Summit 1, Ground Level, Egan Center

Chair: Elena Baralis (Politecnico di Torino)

Automatic Dialogue Summary Generation for Customer Service

Chunyi Liu (AI Labs, Didi Chuxing); Peng Wang (AI Labs, Didi Chuxing); Jiang Xu (AI Labs, Didi Chuxing); Zang Li (AI Labs, Didi Chuxing); Jieping Ye (AI Labs, Didi Chuxing)

Detection of Review Abuse via Semi-Supervised Binary Multi-Target Tensor Decomposition

Anil R Yelundur (Amazon); Vineet Chaoji (Amazon); Bamdev Mishra (Microsoft India)

Unsupervised Clinical Language Translation

Wei-Hung Weng (Massachusetts Institute of Technology); Yu-An Chung (Massachusetts Institute of Technology); Peter Szolovits (Massachusetts Institute of Technology)

Gmail Smart Compose: Real-Time Assisted Writing

Mia Xu Chen (Google); Benjamin N. Lee (Google); Gagan Bansal (Google); Yuan Cao (Google); Shuyuan Zhang (Google); Justin Lu (Google); Jackie Tsay (Google); Yinan Wang (Google); Andrew M. Dai (Google); Zhifeng Chen (Google); Timothy Sohn (Google); Yonghui Wu (Google)

Naranjo Question Answering using End-to-End Multi-task Learning Model

Bhanu Pratap Singh Rawat (University of Massachusetts Amherst); Fei Li (University of Massachusetts Lowell); Hong Yu (University of Massachusetts Lowell)

Applied Data Science Track Session ADS3: Urbanism and Mobility, Summit 5/6, Ground Level, Egan Center

Chair: Mohak Shah (LG Electronics)

DeepUrbanEvent: A System for Predicting Citywide Crowd Dynamics at Big Events

Renhe Jiang (The University of Tokyo & National Institute of Advanced Industrial Science and Technology); Xuan Song (The University of Tokyo & National Institute of Advanced Industrial Science and Technology); Dou Huang (The University of Tokyo); Xiaoya Song (The University of Tokyo & Harbin Institute of Technology); Tianqi Xia (The University of Tokyo & National Institute of Advanced Industrial Science and Technology); Zekun Cai (The University of Tokyo); Zhaonan Wang (National Institute of Advanced Industrial Science and Technology); Kyoung-Sook Kim (National Institute of Advanced Industrial Science and Technology); Ryosuke Shibasaki (The University of Tokyo)

Hydra: A Personalized and Context-Aware Multi-Modal Transportation Recommendation System

Hao Liu (Baidu Research); Yongxin Tong (Beihang University); Panpan Zhang (Baidu Research); Xinjiang Lu (Baidu Research); Jianguo Duan (Baidu Research); Hui Xiong (Business Intelligence Lab)

A Deep Value-network Based Approach for Multi-Driver Order Dispatching

Xiaocheng Tang (AI Labs, Didi Chuxing); Zhiwei (Tony) Qin (AI Labs, Didi Chuxing); Fan Zhang (AI Labs, Didi Chuxing); Zhaodong Wang (Washington State University); Zhe Xu (Didi Chuxing); Yintai Ma (Northwestern University); Hongtu Zhu (AI Labs, Didi Chuxing); Jieping Ye (AI Labs, Didi Chuxing)

Hard to Park? Estimating Parking Difficulty at Scale

Neha Arora (Google Research); James Cook (Google Research); Ravi Kumar (Google Research); Ivan Kuznetsov (Google Research); Yechen Li (Google Research); Huai-Jen Liang (Google Research); Andrew Miller (Google Research); Andrew Tomkins (Google Research); Ivel Tsogsuren (Google Research); Yi Wang (Google Research)

Nostalgin: Extracting 3D City Models from Historical Image Data

Amol Kapoor (Google Research); Hunter Larco (Google Research); Raimondas Kiveris (Google Research)

Research Track Session RT4: Embeddings I, Summit 2, Ground Level, Egan Center

Chair: Kanishka Bhaduri

ProGAN: Network Embedding via Proximity Generative Adversarial Network

Hongchang Gao (University of Pittsburgh); Jian Pei (Simon Fraser University); Heng Huang (University of Pittsburgh)

Scalable Global Alignment Graph Kernel Using Random Features: From Node Embedding to Graph Embedding

Lingfei Wu (IBM Research); Ian En-Hsu Yen (Carnegie Mellon University); Zhen Zhang (Washington University in St. Louis); Kun Xu (IBM Research); Liang Zhao (George Mason University); Xi Peng (University of Delaware); Yinglong Xia (Huawei); Charu Aggarwal (IBM Research)

Scalable Graph Embeddings via Sparse Transpose Proximities

Yuan Yin (Renmin University of China); Zhewei Wei (Renmin University of China)

Enhancing Domain Word Embedding via Latent Semantic Imputation

Shibo Yao (New Jersey Institute of Technology); Dantong Yu (New Jersey Institute of Technology); Keli Xiao (Stony Brook University)

EpiDeep: Exploiting Embeddings for Epidemic Forecasting

Bijaya Adhikari (Virginia Tech); Xinfeng Xu (Virginia Tech); Naren Ramakrishnan (Virginia Tech); B. Aditya Prakash (Virginia Tech)

Research Track Session RT5: Privacy and Policy Learning, Summit 3, Ground Level, Egan Center

Chair: Jie Tang

PrivPy: General and Scalable Privacy-Preserving Data Mining

Yi Li (Tsinghua University); Wei Xu (Tsinghua University)

Auditing Data Provenance in Text-Generation Models

Congzheng Song (Cornell University); Vitaly Shmatikov (Cornell Tech)

Focused Context Balancing for Robust Offline Policy Evaluation

Hao Zou (Tsinghua University & Beijing National Research Center for Information Science and Technology (BNRist).); Kun Kuang (Tsinghua University); Boqi Chen (Boston University & Tsinghua); Peixuan Chen (Tencent); Peng Cui (Tsinghua University)

Off-policy Learning for Multiple Loggers

Li He (JD.com); Long Xia (JD.com); Wei Zeng (Institute of Computing Technology, CAS); Zhi-Ming Ma (Academy of Mathematics and Systems Science, CAS); Yihong Zhao (JD.com); Dawei Yin (JD.com)

Figuring out the User in a Few Steps: Bayesian Multifidelity Active Search with Cokriging

Nikita Klyuchnikov (Skoltech); Davide Mottin (Aarhus University); Georgia Koutrika (Athena Research and Innovation Center); Emmanuel Möller (University of Bonn); Panagiotis Karras (Aarhus University)

Research Track Session RT6: Network Science, Summit 4, Ground Level, Egan Center

Chair: Danai Koutra

Network Density of States

Kun Dong (Cornell University); Austin R. Benson (Cornell University); David Bindel (Cornell University)

Link Prediction with Signed Latent Factors in Signed Social Networks

Pinghua Xu (Wuhan University & Macquarie University); Wenbin Hu (Wuhan University & Shenzhen Research Institute, Wuhan University); Jia Wu (Macquarie University); Bo Du (Wuhan University)

Attribute-Driven Backbone Discovery

Sheng Guan (Washington State University); Hanchao Ma (Washington State University); Yinghui Wu (Washington State University & Pacific Northwest National Laboratory)

Fates of Microscopic Social Ecosystems: Keep Alive or Dead?

Haoyang Li (Tsinghua University); Peng Cui (Tsinghua University); Chengxi Zang (Tsinghua University); Tianyang Zhang (Tsinghua University); Wenwu Zhu (Tsinghua University); Yishi Lin (Tencent)

MCNE: An End-to-End Framework for Learning Multiple Conditional Network Representations of Social Network

Hao Wang (University of Science and Technology of China); Tong Xu (University of Science and Technology of China); Qi Liu (University of Science and Technology of China); Defu Lian (University of Science and Technology of China); Enhong Chen (University of Science and Technology of China); Dongfang Du (Tencent Inc); Han Wu (University of Science and Technology of China); Wen Su (Tencent Inc)

Learning Dynamic Context Graphs for Predicting Social Events

Songgaojun Deng (Stevens Institute of Technology); Huzefa Rangwala (George Mason University); Yue Ning (Stevens Institute of Technology)

4:00PM - 6:00PM

Applied Data Science Track Session ADS4: Real-Time and Online, Summit 1, Ground Level, Egan Center

Chair: Ying Shan (Tencent)

Time-Series Anomaly Detection Service at Microsoft

Hansheng Ren (Microsoft); Bixiong Xu (Microsoft); Yujing Wang (Microsoft); Chao Yi (Microsoft); Congrui Huang (Microsoft); Xiaoyu Kou (Microsoft); Tony Xing (Microsoft); Mao Yang (Microsoft); Jie Tong (Microsoft); Qi Zhang (Microsoft)

Real-time On-Device Troubleshooting Recommendation for Smartphones

Keiichi Ochiai (NTT DOCOMO, INC.); Kohei Senkawa (NTT DOCOMO, INC.); Naoki Yamamoto (NTT DOCOMO, INC.); Yuya Tanaka (NTT DOCOMO, INC.); Yusuke Fukazawa (NTT DOCOMO, INC.)

Real-time Attention Based Look-alike Model for Recommender System

Yudan Liu (WeiXin Group, Tencent Inc.); Kaikai Ge (WeiXin Group, Tencent Inc.); Xu Zhang (WeiXin Group, Tencent Inc.); Leyu Lin (WeiXin Group, Tencent Inc.)

Anomaly Detection for an E-commerce Pricing System

Jagdish Ramakrishnan (Walmart Labs); Elham Shaabani (Walmart Labs); Chao Li (Walmart Labs); Matyas A. Sustik (Walmart Labs)

Online Amnestic DTW to allow Real-Time Golden Batch Monitoring

Chin-Chia Michael Yeh (University of California, Riverside); Yan Zhu (University of California, Riverside); Hoang Anh Dau (University of California, Riverside); Amirali Darvishzadeh (University of California, Riverside); Mikhail Noskov (Aspen Technology); Eamonn Keogh (University of California, Riverside)

Research Track Session RT7: Graph Neural Networks, Summit 2, Ground Level, Egan Center

Chair: Jiliang Tang

Conditional Random Field Enhanced Graph Convolutional Neural Networks

Hongchang Gao (University of Pittsburgh & JD Finance America Corporation); Jian Pei (Simon Fraser University); Heng Huang (University of Pittsburgh & JD Finance America Corporation)

Robust Graph Convolutional Networks Against Adversarial Attacks

Dingyuan Zhu (Tsinghua University); Ziwei Zhang (Tsinghua University); Peng Cui (Tsinghua University); Wenwu Zhu (Tsinghua University)

GCN-MF: Disease-Gene Association Identification By Graph Convolutional Networks and Matrix Factorization

Peng Han (King Abdullah University of Science and Technology); Peng Yang (Cognitive Computing Lab, Baidu Research USA); Peilin Zhao (Tencent AI Lab); Shuo Shang (University of Electronic Science and Technology of China & Inception Institute of Artificial Intelligence); Yong Liu (Alibaba-NTU Singapore Joint Research Institute, Nanyang Technological University); Jiayu Zhou (Michigan State University); Xin Gao (King Abdullah University of Science and Technology); Panos Kalnis (King Abdullah University of Science and Technology)

Cluster-GCN: An Efficient Algorithm for Training Deep and Large Graph Convolutional Networks

Wei-Lin Chiang (National Taiwan University & Google Research); Xuanqing Liu (University of California, Los Angeles & Google Research); Si Si (Google Research); Yang Li (Google Research); Samy Bengio (Google Research); Cho-Jui Hsieh (University of California, Los Angeles)

Graph Representation Learning via Hard and Channel-Wise Attention Networks

Hongyang Gao (Texas A&M University); Shuiwang Ji (Texas A&M University)

Origin-Destination Matrix Prediction via Graph Convolution: A New Perspective of Passenger Demand Modeling

Yuandong Wang (Beihang University); Hongzhi Yin (The University of Queensland); Hongxu Chen (The University of Queensland); Tianyu Wo (Beihang University); Jie Xu (University of Leeds); Kai Zheng (University of Electronic Science and Technology)

Research Track Session RT8: Knowledge Extraction, Summit 3, Ground Level, Egan Center

Chair: Huan Sun

Universal Representation Learning of Knowledge Bases by Jointly Embedding Instances and Ontological Concepts

Junheng Hao (University of California Los Angeles); Muhao Chen (University of California Los Angeles); Wenchao Yu (University of California Los Angeles); Yizhou Sun (University of California Los Angeles); Wei Wang (University of California Los Angeles)

Relation Extraction via Domain-aware Transfer Learning

Shimin Di (The Hong Kong University of Science and Technology); Yanyan Shen (Shanghai Jiao Tong University); Lei Chen (The Hong Kong University of Science and Technology)

Exploiting Cognitive Structure for Adaptive Learning

Qi Liu (University of Science and Technology of China); Shiwei Tong (University of Science and Technology of China); Chuanren Liu (University of Tennessee); Hongke Zhao (Tianjin University); Enhong Chen (University of Science and Technology of China); Haiping Ma (iFLYTEK CO., LTD & State Key Laboratory of Cognitive Intelligence); Shijin Wang (iFLYTEK CO., LTD & State Key Laboratory of Cognitive Intelligence)

Mining Algorithm Roadmap in Scientific Publications

Hanwen Zha (University of California, Santa Barbara); Wenhui Chen (University of California, Santa Barbara); Keqian Li (University of California, Santa Barbara); Xifeng Yan (University of California, Santa Barbara)

Knowledge-aware Graph Neural Networks with Label Smoothness Regularization for Recommender Systems

Hongwei Wang (Stanford University); Fuzheng Zhang (Meituan-Dianping Group); Mengdi Zhang (Meituan-Dianping Group); Jure Leskovec (Stanford University); Miao Zhao (Hong Kong Polytechnic University); Wenjie Li (Hong Kong Polytechnic University); Zhongyuan Wang (Meituan-Dianping Group)

Adaptive Graph Guided Disambiguation for Partial Label Learning

Deng-Bao Wang (Southwest University); Li Li (Southwest University); Min-Ling Zhang (Southeast University & Ministry of Education)

Research Track Session RT9: Mining in Emerging Applications I, Summit 4, Ground Level, Egan Center

Chair: Shandian Zhe

SurfCon: Synonym Discovery on Privacy-Aware Clinical Data

Zhen Wang (The Ohio State University); Xiang Yue (The Ohio State University); Soheil Moosavinasab (Abigail Wexner Research Institute at Nationwide Children's Hospital); Yungui Huang (Abigail Wexner Research Institute at Nationwide Children's Hospital); Simon Lin (Abigail Wexner Research Institute at Nationwide Children's Hospital); Huan Sun (The Ohio State University)

Hierarchical Multi-Task Word Embedding Learning for Synonym Prediction

Hongliang Fei (Baidu Research); Shulong Tan (Baidu Research); Ping Li (Baidu Research)

GroupINN: Grouping-based Interpretable Neural Network for Classification of Limited, Noisy Brain Data

Yujun Yan (University of Michigan); Jiong Zhu (University of Michigan); Marlena Duda (University of Michigan); Eric Solarz (University of Michigan); Chandra Sripada (University of Michigan); Danai Koutra (University of Michigan)

PerDREP: Personalized Drug Effectiveness Prediction from Longitudinal Observational Data

Sanjoy Dey (IBM T. J. Watson Research Center); Ping Zhang (Ohio State University); Daby Sow (IBM T. J. Watson Research Center); Kenney Ng (IBM T. J. Watson Research Center)

Retaining Privileged Information for Multi-Task Learning

Fengyi Tang (Michigan State University); Cao Xiao (IQVIA); Fei Wang (Weill Cornell Medical College); Jiayu Zhou (Michigan State University); Li-wei H. Lehman (Massachusetts Institute of Technology)

A Permutation Approach to Assess Confounding in Machine Learning Applications for Digital Health

Elias Chaibub Neto (Sage Bionetworks); Abhishek Pratap (Sage Bionetworks); Thanneer M. Perumal (Sage Bionetworks); Meghasyam Tummalacherla (Sage Bionetworks); Brian M. Bot (Sage Bionetworks); Lara Mangravite (Sage Bionetworks); Larsson Omberg (Sage Bionetworks)

Wednesday August 7th, 2019

10:00AM - 12:00PM

Applied Data Science Track Session ADS5: Scalability and Novel Applications, Summit 1, Ground Level, Egan Center

Chair: Romer Rosales (LinkedIn)

Large-Scale Training Framework for Video Annotation

Seong Jae Hwang (University of Wisconsin-Madison); Joonseok Lee (Google Research); Balakrishnan Varadarajan (Google Research); Ariel Gordon (Google Research); Zheng Xu (Google Research); Apostol (Paul) Natsev (Google Research)

A Data-Driven Approach for Multi-level Packing Problems in Manufacturing Industry

Lei Chen (Huawei Noah's Ark Lab); Xialiang Tong (Huawei Noah's Ark Lab); Mingxuan Yuan (Huawei Noah's Ark Lab); Jia Zeng (Huawei Noah's Ark Lab); Lei Chen (Hong Kong University of Science and Technology)

Actions Speak Louder than Goals: Valuing Player Actions in Soccer

Tom Decroos (KU Leuven); Lotte Bransen (SciSports); Jan Van Haaren (SciSports); Jesse Davis (KU Leuven)

Enabling Onboard Detection of Events of Scientific Interest for the Europa Clipper Spacecraft

Kiri L. Wagstaff (California Institute of Technology); Gary Doran (California Institute of Technology); Ashley Davies (California Institute of Technology); Saadat Anwar (Arizona State University); Srijia Chakraborty (Arizona State University); Marissa Cameron (California Institute of Technology); Ingrid Daubar (California Institute of Technology); Cynthia Phillips (California Institute of Technology)

DeepRoof: A Data-driven Approach For Solar Potential Estimation Using Rooftop Imagery

Stephen Lee (University of Massachusetts, Amherst); Srinivasan Iyengar (Microsoft Research, Bangalore); Menghong Feng (University of Massachusetts, Amherst); Prashant Shenoy (University of Massachusetts, Amherst); Subhransu Maji (University of Massachusetts, Amherst)

Research Track Session RT10: Embeddings II, Summit 2, Ground Level, Egan Center

Chair: Jundong Li

Individualized Indicator for All: Stock-wise Technical Indicator Optimization with Stock Embedding

Zhige Li (Shanghai Jiao Tong University); Derek Yang (Tsinghua University); Li Zhao (Microsoft); Jiang Bian (Microsoft); Tao Qin (Microsoft); Tie-Yan Liu (Microsoft)

Efficient Global String Kernel with Random Features: Beyond Counting Substructures

Lingfei Wu (IBM Research); Ian En-Hsu Yen (CMU); Siyu Huo (IBM Research); Liang Zhao (George Mason University); Kun Xu (IBM Research); Liang Ma (IBM Research); Shouling Ji (Zhejiang University); Charu Aggarwal (IBM Research)

HATS: A Hierarchical Sequence-Attention Framework for Inductive Set-of-Sets Embeddings
Changping Meng (Purdue University); Jiasen Yang (Purdue University); Bruno Ribeiro (Purdue University); Jennifer Neville (Purdue University)

TUBE: Embedding Behavior Outcomes for Predicting Success
Daheng Wang (University of Notre Dame); Tianwen Jiang (University of Notre Dame & Harbin Institute of Technology); Nitesh V. Chawla (University of Notre Dame); Meng Jiang (University of Notre Dame)

Multi-Relational Classification via Bayesian Ranked Non-Linear Embeddings
Ahmed Rashed (University of Hildesheim); Josif Grabocka (University of Hildesheim); Lars Schmidt-Thieme (University of Hildesheim)

Learning Network-to-Network Model for Content-rich Network Embedding
Zhicheng He (Nankai University); Jie Liu (Nankai University); Na Li (Nankai University); Yalou Huang (Nankai University)

Research Track Session RT11: Clustering and Visualization, Summit 3, Ground Level, Egan Center

Chair: David Anastasiu

Scalable Hierarchical Clustering with Tree Grafting
Nicholas Monath (University of Massachusetts Amherst); Ari Kobren (University of Massachusetts Amherst); Akshay Krishnamurthy (Microsoft Research); Michael Glass (International Business Machines); Andrew McCallum (University of Massachusetts Amherst)

K-Multiple-Means: A Multiple-Means Clustering Method with Specified K Clusters
Feiping Nie (School of Computer Science and Center for OPTical IMagery Analysis and Learning (OPTIMAL), Northwestern Polytechnical University); Cheng-Long Wang (School of Computer Science and Center for OPTical IMagery Analysis and Learning (OPTIMAL), Northwestern Polytechnical University); Xuelong Li (School of Computer Science and Center for OPTical IMagery Analysis and Learning (OPTIMAL), Northwestern Polytechnical University)

A Multiscale Scan Statistic for Adaptive Submatrix Localization
Yuchao Liu (Microsoft Corporation); Ery Arias-Castro (University of California San Diego)

Robust Task Grouping with Representative Tasks for Clustered Multi-Task Learning
Yaqiang Yao (University of Science and Technology of China); Jie Cao (Nanjing University of Finance and Economics); Huanhuan Chen (University of Science and Technology of China)

AtSNE: Efficient and Robust Visualization on GPU through Hierarchical Optimization
Cong Fu (Zhejiang University); Yonghui Zhang (Zhejiang University); Deng Cai (Alibaba-Zhejiang University Joint Institute of Frontier Technologies); Xiang Ren (University of Southern California)

Research Track Session RT12: Recommender Systems I, Summit 4, Ground Level, Egan Center

Chair: Xia Ning

Predicting Embedding Trajectories in Temporal Interaction Networks

Srijan Kumar (Stanford University); Xikun Zhang (University of Illinois); Jure Leskovec (Stanford University)

Environment Reconstruction with Hidden Confounders for Reinforcement Learning based Recommendation

Wenjie Shang (Nanjing University); Yang Yu (Nanjing University); Qingyang Li (AI Labs, Didi Chuxing); Zhiwei Qin (AI Labs, Didi Chuxing); Yiping Meng (AI Labs, Didi Chuxing); Jieping Ye (AI Labs, Didi Chuxing)

Empowering A* Search Algorithms with Neural Networks for Personalized Route Recommendation

Jingyuan Wang (Beihang University); Ning Wu (Beihang University); Wayne Xin Zhao (Renmin University of China); Fanzhang Peng (Beihang University); Xin Lin (Beihang University)

Effective and Efficient Reuse of Past Travel Behavior for Route Recommendation

Lisi Chen (Inception Institute of Artificial Intelligence); Shuo Shang (University of Electronic Science and Technology of China & Inception Institute of Artificial Intelligence); Christian S. Jensen (Aalborg University); Bin Yao (Shanghai Jiao Tong University); Zhiwei Zhang (Hong Kong Baptist University); Ling Shao (Inception Institute of Artificial Intelligence)

State-Sharing Sparse Hidden Markov Models for Personalized Sequences

Hongzhi Shi (Tsinghua University); Chao Zhang (Georgia Institute of Technology); Quanming Yao (4Paradigm Inc.); Yong Li (Tsinghua University); Funing Sun (Tencent Inc.); Depeng Jin (Tsinghua University)

1:30PM - 3:30PM

Applied Data Science Track Session ADS6: Environment and Sustainability, Summit 1, Ground Level, Egan Center

Chair: Noam Koenigstein (Microsoft)

Nonparametric Mixture of Sparse Regressions on Spatio-Temporal Data -- An Application to Climate Prediction

Yumin Liu (Northeastern University); Junxiang Chen (Northeastern University); Auroop Ganguly (Northeastern University); Jennifer Dy (Northeastern University)

Deep Uncertainty Quantification: A Machine Learning Approach for Weather Forecasting

Bin Wang (University of Technology Sydney & Southwest Jiaotong University); Jie Lu (University of Technology Sydney); Zheng Yan (University of Technology Sydney); Huaishao Luo (Southwest Jiaotong University); Tianrui Li (Southwest Jiaotong University); Yu Zheng (Xidian University & JD Intelligent Cities Research); Guangquan Zhang (University of Technology Sydney)

Towards Sustainable Dairy Management - A Machine Learning Enhanced Method for Estrus Detection

Kevin Fauvel (Universite Rennes, Inria, CNRS, IRISA); Véronique Masson (Universite Rennes, Inria, CNRS, IRISA); Élisabeth Fromont (Universite Rennes, Inria, CNRS, IRISA); Philippe Faverdin (PEGASE, INRA, AGROCAMPUS OUEST); Alexandre Termier (Universite Rennes, Inria, CNRS, IRISA)

Precipitation Nowcasting with Satellite Imagery

Vadim Lebedev (Yandex); Vladimir Ivashkin (Yandex); Irina Rudenko (Yandex); Alexander Ganshin (Yandex); Alexander Molchanov (Yandex); Sergey Ovcharenko (Yandex); Ruslan Grokhovetskiy (Yandex); Ivan Bushmarinov (Yandex); Dmitry Solomentsev (Yandex)

AccuAir: Winning Solution to Air Quality Prediction for KDD Cup 2018

Zhipeng Luo (DeepBlue Technology); Jianqiang Huang (Peking University); Ke Hu (Alibaba Group); Xue Li (Microsoft); Peng Zhang (Tianjin University)

Research Track Session RT13: Learning, Summit 2, Ground Level, Egan Center

Chair: Xiang Ren

Learning from Incomplete and Inaccurate Supervision

Zhen-Yu Zhang (Nanjing University); Peng Zhao (Nanjing University); Yuan Jiang (Nanjing University); Zhi-Hua Zhou (Nanjing University)

Automating Feature Subspace Exploration via Multi-Agent Reinforcement Learning

Kunpeng Liu (University of Central Florida); Yanjie Fu (University of Central Florida); Pengfei Wang (CNIC, Chinese Academy of Sciences); Le Wu (Hefei University of Technology); Rui Bo (Missouri Univ. of Sci. and Tech.); Xiaolin Li (Nanjing University)

Task-Adversarial Co-Generative Nets

Pei Yang (Arizona State University & South China University of Technology); Qi Tan (South China Normal University); Hanghang Tong (Arizona State University); Jingrui He (Arizona State University)

Learning Class-Conditional GANs with Active Sampling

Ming-Kun Xie (Nanjing University of Aeronautics and Astronautics); Sheng-Jun Huang (Nanjing University of Aeronautics and Astronautics)

Adaptive Unsupervised Feature Selection on Attributed Networks

Jundong Li (Arizona State University); Ruocheng Guo (Arizona State University); Chenghao Liu (Singapore Management University); Huan Liu (Arizona State University)

Identifiability of Cause and Effect using Regularized Regression

Alexander Marx (Max Planck Institute for Informatics); Jilles Vreeken (CISPA Helmholtz Center for Information Security)

Research Track Session RT14: Anomaly Detection, Summit 3, Ground Level, Egan Center

Chair: Leman Akoglu

EdMot: An Edge Enhancement Approach for Motif-aware Community Detection

Pei-Zhen Li (Sun Yat-sen University); Ling Huang (Sun Yat-sen University); Chang-Dong Wang (Sun Yat-sen University); Jian-Huang Lai (Sun Yat-sen University)

Sequential Anomaly Detection using Inverse Reinforcement Learning
Min-hwan Oh (Columbia University); Garud Iyengar (Columbia University)

Deep Anomaly Detection with Deviation Networks
Guansong Pang (University of Adelaide); Chunhua Shen (University of Adelaide); Anton van den Hengel (University of Adelaide)

Discovering Unexpected Local Nonlinear Interactions in Scientific Black-box Models
Michael Doron (Hebrew University of Jerusalem); Idan Segev (Hebrew University of Jerusalem); Dafna Shahaf (Hebrew University of Jerusalem)

Research Track Session RT15: Mining in Emerging Applications II, Summit 4, Ground Level, Egan Center

Chair: Petko Bogdanov

Optimizing Impression Counts for Outdoor Advertising
Yipeng Zhang (RMIT University); Yuchen Li (Singapore Management University); Zhifeng Bao (RMIT University); Songsong Mo (Wuhan University & RMIT University); Ping Zhang (Huawei)

Three-Dimensional Stable Matching Problem for Spatial Crowdsourcing Platforms
Boyang Li (Northeastern University); Yurong Cheng (Beijing Institute of Technology); Ye Yuan (Northeastern University); Guoren Wang (Beijing Institute of Technology); Lei Chen (The Hong Kong University of Science and Technology)

Hidden POI Ranking with Spatial Crowdsourcing
Yue Cui (University of Electronic Science and Technology of China); Liwei Deng (University of Electronic Science and Technology of China); Yan Zhao (Soochow University); Bin Yao (Shanghai Jiao Tong University); Vincent W. Zheng (WeBank); Kai Zheng (University of Electronic Science and Technology of China)

Hidden Markov Contour Tree: A Spatial Structured Model for Hydrological Applications
Zhe Jiang (University of Alabama); Arpan Man Sainju (University of Alabama)

Urban Traffic Prediction from Spatio-Temporal Data Using Deep Meta Learning
Zheyi Pan (Shanghai Jiaotong University); Yuxuan Liang (Xidian University); Weifeng Wang (Shanghai Jiaotong University); Yong Yu (Shanghai Jiaotong University); Yu Zheng (JD Intelligent Cities Research); Junbo Zhang (JD Intelligent Cities Research)

Co-Prediction of Multiple Transportation Demands Based on Deep Spatio-Temporal Neural Network
Junchen Ye (Beihang University); Leilei Sun (Beihang University); Bowen Du (Beihang University); Yanjie Fu (University of Central Florida); Xinran Tong (Beihang University); Hui Xiong (Rutgers University)

Thursday August 8th, 2019

10:00AM - 12:00PM

Applied Data Science Track Session ADS8: Sensor and Consumer Services, Summit 1, Ground Level, Egan Center

Chair: Marc Najork (Google)

Towards Identifying Impacted Users in Cellular Services

Shobha Venkataraman (Unaffiliated); Jia Wang (AT&T Labs -- Research)

Ambulatory Atrial Fibrillation Monitoring Using Wearable Photoplethysmography with Deep Learning

Yichen Shen (Samsung Strategy and Innovation Center); Maxime Voisin (Stanford University); Alireza Aliamiri (Samsung Strategy and Innovation Center); Anand Avati (Stanford University); Awni Hannun (Stanford University); Andrew Ng (Stanford University)

Developing Measures of Cognitive Impairment in the Real World from Consumer-Grade Multimodal Sensor Streams

Richard Chen (Apple Inc.); Filip Jankovic (Evidation Health, Inc.); Nikki Marinsek (Evidation Health, Inc.); Luca Foschini (Evidation Health, Inc.); Lampros Kourtis (Evidation Health, Inc.); Alessio Signorini (Evidation Health, Inc.); Melissa Pugh (Eli Lilly and Company); Jie Shen (Eli Lilly and Company); Roy Yaari (Eli Lilly and Company); Vera Maljkovic (Eli Lilly and Company); Marc Sunga (Eli Lilly and Company); Han Hee Song (Apple Inc.); Hyun Joon Jung (Apple Inc.); Belle Tseng (Apple Inc.); Andrew Trister (Apple Inc.)

Sequence Multi-task Learning to Forecast Mental Wellbeing from Sparse Self-reported Data

Dimitris Spathis (University of Cambridge); Sandra Servia-Rodriguez (University of Cambridge); Katayoun Farrahi (University of Southampton); Cecilia Mascolo (University of Cambridge); Jason Rentfrow (University of Cambridge)

Learning to Prescribe Interventions for Tuberculosis Patients Using Digital Adherence Data

Jackson A. Killian (University of Southern California); Bryan Wilder (University of Southern California); Amit Sharma (Microsoft Research India); Vinod Choudhary (RNTCP, Mumbai); Bistra Dilkina (University of Southern California); Milind Tambe (University of Southern California)

Applied Data Science Track Session ADS7: Entity Extraction, Linking, and Search, Summit 5/6, Ground Level, Egan Center

Chair: Myra Spiliopoulou (Otto-von-Guericke-University Magdeburg)

A Collaborative Learning Framework to Tag Refinement for Points of Interest

Jingbo Zhou (Baidu Research & National Engineering Laboratory of Deep Learning Technology and Application); Shan Gou (Baidu Research & University of Electronic Science and Technology of China); Renjun Hu (Business Intelligence Lab, Baidu Research); Dongxiang Zhang (Zhejiang University); Jin Xu

(Baidu Research); Xuehui Wu (University of Electronic Science and Technology of China); Airong Jiang (Baidu Research & National Engineering Laboratory of Deep Learning Technology and Application); Hui Xiong (Baidu Research, National Engineering Laboratory of Deep Learning Technology and Application, & Rutgers University)

Combining Decision Trees and Neural Networks for Learning-to-Rank in Personal Search

Pan Li (University of Illinois at Urbana - Champaign & Google Inc.); Zhen Qin (Google Inc.); Xuanhui Wang (Google Inc.); Donald Metzler (Google Inc.)

Fairness-Aware Ranking in Search & Recommendation Systems with Application to LinkedIn Talent Search

Sahin Cem Geyik (LinkedIn Corporation); Stuart Ambler (LinkedIn Corporation); Krishnam Kenthapadi (LinkedIn Corporation)

How to Invest my Time: Lessons from Human-in-the-Loop Entity Extraction

Shanshan Zhang (Temple University); Lihong He (Temple University); Eduard Dragut (Temple University); Slobodan Vucetic (Temple University)

OAG: Toward Linking Large-scale Heterogeneous Entity Graphs

Fanjin Zhang (Tsinghua University); Xiao Liu (Tsinghua University); Jie Tang (Tsinghua University); Yuxiao Dong (Microsoft Research); Peiran Yao (Tsinghua University); Jie Zhang (Tsinghua University); Xiaotao Gu (Tsinghua University); Yan Wang (Tsinghua University); Bin Shao (Microsoft Research); Rui Li (Microsoft Research); Kuansan Wang (Microsoft Research)

Research Track Session RT16: Machine Learning Themes I, Summit 2, Ground Level, Egan Center

Chair: Shandian Zhe

Dynamical Origins of Distribution Functions

Chengxi Zang (Tsinghua University & Weill Cornell Medicine); Peng Cui (Tsinghua University); Wenwu Zhu (Tsinghua University); Fei Wang (Weill Cornell Medicine)

Scaling Multinomial Logistic Regression Via Hybrid Parallelism

Parameswaran Raman (University of California Santa Cruz); Sriram Srinivasan (University of California Santa Cruz); Shin Matsushima (University of Tokyo); Xinhua Zhang (University of Illinois Chicago); Hyokun Yun (Amazon); S.V.N. Vishwanathan (Amazon)

DeepGBM: A Deep Learning Framework Distilled by GBDT for Online Prediction Tasks

Guolin Ke (Microsoft Research); Zhenhui Xu (Peking University); Jia Zhang (Microsoft Research); Jiang Bian (Microsoft Research); Tie-Yan Liu (Microsoft Research)

Graph-based Semi-Supervised & Active Learning for Edge Flows

Junteng Jia (Cornell University); Michael T. Schaub (Massachusetts Institute of Technology & University of Oxford); Santiago Segarra (Rice University); Austin R. Benson (Cornell University)

A Minimax Game for Instance based Selective Transfer Learning

Bo Wang (Alibaba Group); Minghui Qiu (Alibaba Group & Zhejiang University); Xisen Wang (Alibaba Group); Yaliang Li (Alibaba); Yu Gong (Alibaba); Xiaoyi Zeng (Alibaba); Jun Huang (Alibaba); Bo Zheng (Alibaba); Deng Cai (Alibaba); Jingren Zhou (Alibaba)

AutoNE: Hyperparameter Optimization for Massive Network Embedding

Ke Tu (Tsinghua University); Jianxin Ma (Tsinghua University); Peng Cui (Tsinghua University); Jian Pei (Simon Fraser University and JD.com); Wenwu Zhu (Tsinghua University)

Research Track Session RT17: Interpretability, Summit 3, Ground Level, Egan Center

Chair: Liang Zhao

Learning Interpretable Metric between Graphs: Convex Formulation and Computation with Graph Mining
Tomoki Yoshida (Nagoya Institute of Technology); Ichiro Takeuchi (Nagoya Institute of Technology & National Institute for Material Science & RIKEN Center for Advanced Intelligence Project); Masayuki Karasuyama (Nagoya Institute of Technology & National Institute for Material Science & Japan Science and Technology Agency)

Axiomatic Interpretability for Multiclass Additive Models

Xuezhou Zhang (University of Wisconsin-Madison); Sarah Tan (Cornell University); Paul Koch (Microsoft Research); Yin Lou (Ant Financial); Urszula Chajewska (Microsoft); Rich Caruana (Microsoft Research)

Incorporating Interpretability into Latent Factor Models via Fast Influence Analysis

Weiyu Cheng (Shanghai Jiao Tong University); Yanyan Shen (Shanghai Jiao Tong University); Linpeng Huang (Shanghai Jiao Tong University); Yanmin Zhu (Shanghai Jiao Tong University)

Improving the Quality of Explanations with Local Embedding Perturbations

Yunzhe Jia (University of Melbourne); James Bailey (University of Melbourne); Kotagiri Ramamohanarao (University of Melbourne); Christopher Leckie (University of Melbourne); Michael E. Houle (National Institute of Informatics)

Log2Intent: Towards Interpretable User Modeling via Recurrent Semantics Memory Unit

Zhiqiang Tao (Northeastern University); Sheng Li (University of Georgia); Zhaowen Wang (Adobe Research); Chen Fang (ByteDance AI Lab); Longqi Yang (Cornell University); Handong Zhao (Adobe Research); Yun Fu (Northeastern University)

Interpretable and Steerable Sequence Learning via Prototypes

Yao Ming (Hong Kong University of Science and Technology); Panpan Xu (Bosch Research North America); Huamin Qu (Hong Kong University of Science and Technology); Liu Ren (Bosch Research North America)

Research Track Session RT18: Recommender Systems II, Summit 4, Ground Level, Egan Center

Chair: Xia Ning

λ Opt: Learn to Regularize Recommender Models in Finer Levels

Yihong Chen (Tsinghua University & Microsoft Research); Bei Chen (Microsoft Research); Xiangnan He (University of Science and Technology of China); Chen Gao (Tsinghua University); Yong Li (Tsinghua University); Jian-Guang Lou (Microsoft Research); Yue Wang (Tsinghua University)

Exact-K Recommendation via Maximal Clique Optimization

Yu Gong (Alibaba Group); Yu Zhu (Alibaba Group); Lu Duan (Zhejiang Cainiao Supply Chain Management Co., Ltd); Qingwen Liu (Alibaba Group); Ziyu Guan (Xidian University); Fei Sun (Alibaba Group); Wenwu Ou (Alibaba Group); Qili Zhu (Shanghai Jiao Tong University)

MeLU: Meta-Learned User Preference Estimator for Cold-Start Recommendation

Hoyeop Lee (NCSOFT Co.); Jinbae Im (NCSOFT Co.); Seongwon Jang (NCSOFT Co.); Hyunsouk Cho (NCSOFT Co.); Sehee Chung (NCSOFT Co.)

DAML: Dual Attention Mutual Learning between Ratings and Reviews for Item Recommendation

Donghua Liu (Wuhan University); Jing Li (Wuhan University); Bo Du (Wuhan University); Jun Chang (Wuhan University); Rong Gao (Hubei University of Technology)

Enhancing Collaborative Filtering with Generative Augmentation

Qinyong Wang (The University of Queensland); Hongzhi Yin (The University of Queensland); Hao Wang (Alibaba AI Labs); Quoc Viet Hung Nguyen (Griffith University); Zi Huang (The University of Queensland); Lizhen Cui (Shandong University)

OBOE: Collaborative Filtering for AutoML Model Selection

Chengrun Yang (Cornell University); Yuji Akimoto (Cornell University); Dae Won Kim (Cornell University); Madeleine Udell (Cornell University)

1:30PM - 3:30PM

Applied Data Science Track Session ADS9: E-commerce and Advertising, Summit 1, Ground Level, Egan Center

Chair: Anne Kao (Boeing)

SMOILE: A Shopper Marketing Optimization and Inverse Learning Engine

Abhilash Reddy Chenreddy (University of Illinois at Chicago); Parshan Pakiman (University of Illinois at Chicago); Selvaprabu Nadarajah (Information and Decision Sciences); Ranganathan Chandrasekaran (Information and Decision Sciences); Rick Abens (Foresight ROI, Inc.)

Two-Sided Fairness for Repeated Matchings in Two-Sided Markets: A Case Study of a Ride-Hailing Platform

Tom Sühr (Max Planck Institute for Software Systems); Asia J. Biega (Microsoft Research); Meike Zehlike (Max Planck Institute for Software Systems); Krishna P. Gummadi (Max Planck Institute for Software Systems); Abhijnan Chakraborty (Max Planck Institute for Software Systems)

Reserve Price Failure Rate Prediction with Header Bidding in Display Advertising

Achir Kalra (Forbes Media LLC); Chong Wang (S&P Global); Cristian Borcea (New Jersey Institute of Technology); Yi Chen (New Jersey Institute of Technology)

The Identification and Estimation of Direct and Indirect Effects in A/B Tests through Causal Mediation Analysis

Xuan Yin (Etsy, Inc.); Liangjie Hong (Etsy, Inc.)

Personalized Purchase Prediction of Market Baskets with Wasserstein-Based Sequence Matching
Mathias Kraus (ETH Zurich); Stefan Feuerriegel (ETH Zurich)

Research Track Session RT19: Machine Learning Themes II, Summit 2, Ground Level, Egan Center

Chair: Feng Chen

Disambiguation Enabled Linear Discriminant Analysis for Partial Label Dimensionality Reduction
Jing-Han Wu (Southeast University & Ministry of Education); Min-Ling Zhang (Southeast University & Ministry of Education)

ET-Lasso: A New Efficient Tuning of Lasso-type Regularization for High-Dimensional Data
Songsan Yang (Pennsylvania State University); Jiawei Wen (Pennsylvania State University); Xiang Zhan (Pennsylvania State University); Daniel Kifer (Pennsylvania State University)

Isolation Set-Kernel and Its Application to Multi-Instance Learning
Bi-Cun Xu (Nanjing University); Kai Ming Ting (Federation University, Australia); Zhi-Hua Zhou (Nanjing University)

Separated Trust Regions Policy Optimization Method
Luobao Zou (Shanghai Jiao Tong University); Zhiwei Zhuang (Shanghai Jiao Tong University); Yin Cheng (Shanghai Jiao Tong University); Xuechun Wang (Shanghai Jiao Tong University); Weidong Zhang (Shanghai Jiao Tong University)

QuesNet: A Unified Representation for Heterogeneous Test Questions
Yu Yin (University of Science and Technology of China); Qi Liu (University of Science and Technology of China); Zhenya Huang (University of Science and Technology of China); Enhong Chen (University of Science and Technology of China); Wei Tong (University of Science and Technology of China); Shijin Wang (iFLYTEK CO., LTD. & State Key Laboratory of Cognitive Intelligence); Yu Su (iFLYTEK CO., LTD. & State Key Laboratory of Cognitive Intelligence)

Research Track Session RT20: Online and Incremental Algorithms, Summit 3, Ground Level, Egan Center

Chair: Albert Bifet

Scaling Multi-Armed Bandit Algorithms
Edouard Fouché (Karlsruhe Institute of Technology); Junpei Komiyama (University of Tokyo); Klemens Böhm (Karlsruhe Institute of Technology)

Adaptive Deep Models for Incremental Learning: Considering Capacity Scalability and Sustainability
Yang Yang (Nanjing University); Da-Wei Zhou (Nanjing University); De-Chuan Zhan (Nanjing University); Hui Xiong (Rutgers University); Yuan Jiang (Nanjing University)

Streaming Adaptation of Deep Forecasting Models using Adaptive Recurrent Units
Prathamesh Deshpande (IIT Bombay); Sunita Sarawagi (IIT Bombay)

Dual Averaging Method for Online Graph-structured Sparsity
Baojian Zhou (University at Albany, SUNY); Feng Chen (University at Albany, SUNY); Yiming Ying
(University at Albany, SUNY)

Factorization Bandits for Online Influence Maximization
Qingyun Wu (University of Virginia); Zhige Li (Shanghai Jiao Tong University); Huazheng Wang (University
of Virginia); Wei Chen (Microsoft Research); Hongning Wang (University of Virginia)