AAAI-20 Accepted Papers – Main Technical Track

(The following list includes all accepted papers for the main track of AAAI-20. The list is sorted according to submission number order. Titles and spelling may not be final. Final titles will be reflected in the final program and proceedings according to what is submitted by authors at the camera-ready copy deadline. Additional tracks will be posted in January.)

3: InstaNAS: Instance-aware Neural Architecture Search

An-Chieh Cheng (National Tsing-Hua University)*; Chieh Hubert Lin (National Tsing Hua University); Da-Cheng Juan (Google); Wei Wei (Google); Min Sun (NTHU)

23: BOWL: Bayesian Optimization for Weight Learning in Probabilistic Soft Logic Sriram Srinivasan (UC Santa Cruz)*; Golnoosh Farnadi (Polytechnique Montreal); Lise Getoor (University of California Santa Cruz)

38: Regularized Wasserstein Means for Aligning Distributional Data Liang Mi (Arizona State University)*; wen zhang (ASU); Yalin Wang (Arizona State University)

46: Geometry-constrained Car Recognition Using a 3D Perspective Network
Rui Zeng (Queensland University of Technology)*; Zongyuan Ge (Monash); SIMON DENMAN (Queensland University of Technology, Australia); Sridha Sridharan (QUT); Clinton Fookes (Queensland University of Technology)

53: Further Understanding Videos through Adverbs: A New Video Task
Bo Pang (Shanghai Jiao Tong University); Kaiwen Zha (Shanghai Jiao Tong University); Yifan Zhang (Shanghai Jiao Tong University); Cewu Lu (Shanghai Jiao Tong University)*

57: Adaptive Unimodal Cost Volume Filtering for Deep Stereo Matching Youmin Zhang (Beihang University)*; Yimin Chen (Beihang University); Xiao Bai (Beihang University); yu kun (DeepMotion); Suihanjin Yu (Beihang University); li zhiwei (DeepMotion); Kuiyuan Yang (DeepMotion)

61: Distilling Portable Generative Adversarial Networks for Image Translation
Hanting Chen (Peking University)*; Yunhe Wang (Huawei Noah's Ark Lab); Han Shu (Huawei Noah's Ark Lab);
Changyuan Wen (Huawei); Chunjing Xu (Huawei Noah's Ark Lab); Boxin Shi (Peking University); Chao Xu (Peking University); Chang Xu (University of Sydney)

66: Privacy-Preserving Gradient Boosting Decision Trees

Qinbin Li (National University of Singapore)*; Zhaomin Wu (National University of Singapore); Zeyi Wen (The University of Western Australia); Bingsheng He (National University of Singapore)

74: Progressive Feature Polishing Network for Salient Object Detection
Bo Wang (Zhejiang University); Quan Chen (Alibaba Group)*; Min Zhou (Alibaba Group); Zhiqiang Zhang (Alibaba group); Xiaogang Jin (Zhejiang University); Kun Gai (Alibaba Group)

126: Deep Generative Probabilistic Graph Neural Networks for Scene Graph Generation Mahmoud Khademi (Simon Fraser University)*; Oliver Schulte (Simon Fraser University)

131: Reinforcing an Image Caption Generator using Off-line Human Feedback
Paul Hongsuck Seo (POSTECH)*; Piyush Sharma (Google Research); Tomer Levinboim (Google); Bohyung Han
(Seoul National University); Radu Soricut (Google)

133: Are Noisy Sentences Useless for Distant Supervised Relation Extraction?

Yu-Ming Shang (Bit)*; Heyan Huang (Beijing Engineering Research Center of High Volume Language Information Processing and Cloud Computing Applications, Department of Computer Science and Technology, Beijing Institute of technology); Xian-Ling Mao (Bit); Xin Sun (Beijing Institute of Technology); Wei Wei (Huazhong University of Science and Technology)

134: R\$^2\$MRF: Defocus Blur Detection via Recurrently Refining Multi-scale Residual Features Chang Tang (China University of Geosciences)*; Xinwang Liu (National University of Defense Technology); Xinzhong Zhu (Zhejiang Normal University); En Zhu (National University of Defense Technology); Kun Sun (China University of Geosciences(Wuhan)); Pichao Wang (Alibaba Group (U.S.) Inc.); Lizhe Wang (China University of Geosciences); Albert Zomaya (The University of Sydney)

138: Pose-Guided Multi-Granularity Attention Network for Text-Based Person Search Ya Jing (Institute of Automation, Chinese Academy of Sciences)*; Chenyang Si (Institute of Automation, Chinese Academy of Sciences); Junbo Wang (CASIA); Wei Wang (Institute of Automation Chinese Academy of Sciences); Liang Wang (NLPR, China); Tieniu Tan (NLPR, China)

147: Fast and Robust Face-to-Parameter Translation for Game Character Auto-Creation
Tianyang Shi (NetEase Fuxi Al Lab)*; Zhengxia Zou (University of Michigan); Yi Yuan (NetEase Fuxi Al Lab); Changjie
Fan (NetEase Fuxi Al Lab)

159: Comparing Election Methods Where Each Voter Ranks Only Few Candidates Skowron Piotr (University of Warsaw)*; Matthias Bentert (TU Berlin)

171: 3D Crowd Counting via Multi-View Fusion with 3D Gaussian Kernels
Qi Zhang (City University of Hong Kong, Hong Kong)*; Antoni Chan (City University of Hong Kong, Hong, Kong)

175: Characterizing Membership Privacy in Stochastic Gradient Langevin Dynamics
Bingzhe Wu (Peking University)*; Chaochao Chen (Ant Financial); Shiwan Zhao (IBM Research); Cen Chen (Ant Financial Services Group); Yuan Yao (HongKong University of Science and Technology); Guangyu Sun (Peking University); Li Wang (Ant Financial); Xiaolu Zhang (Ant Financial Services Group); Jun Zhou (Ant Financial)

176: Optimal Feature Transport for Cross-View Image Geo-Localization
Yujiao Shi (ANU)*; Xin Yu (Australian National University); Liu Liu (ANU); Tong Zhang (Australian National University); HONGDONG LI (Australian National University, Australia)

178: Machine Number Sense: A Dataset of Visual Arithmetic Problems for Abstract and Relational Reasoning Wenhe Zhang (Peking University)*; Chi Zhang (University of California, Los Angeles); Yixin Zhu (UCLA); Song-Chun Zhu (UCLA)

193: Google Research Football: A Novel Reinforcement Learning Environment
Karol Kurach (Google Brain)*; Anton Raichuk (Google); Piotr Stańczyk (Google Brain); Michał Zając (Google Brain);
Olivier Bachem (Google Brain); Lasse Espeholt (DeepMind); Carlos Riquelme (Google Brain); Damien Vincent
(Google Brain); Marcin Michalski (Google); Olivier Bousquet (Google); Sylvain Gelly (Google Brain)

199: Chained Representation Cycling: Learning to Estimate 3D Human Pose and Shape by Cycling Between Representations

Nadine Rüegg (ETH Zürich, Max-Planck Institute for Intelligent Systems)*; Christoph Lassner (Facebook Reality Labs); Michael Black (Max Planck Institute for Intelligent Systems); Konrad Schindler (ETH)

206: PsyNet: Self-supervised Approach to Object Localization using Point Symmetric Transformation Kyungjune Baek (Yonsei University); Minhyun Lee (Yonsei University); Hyunjung Shim (Yonsei University)*

208: Reduction and Local Search for Weighted Graph Coloring Problem

Yiyuan Wang (northeast normal university)*; Shaowei Cai (Institute of Software, Chinese Academy of Sciences); Shiwei Pan (northeast normal university); Ximing Li (Jilin University); Minghao Yin (northeast normal university)

270: A Practical Approach to Forgetting in Description Logics with Nominals

Yizheng Zhao (Nanjing University)*; Renate Schmidt (Manchester); Yuejie Wang (Peking University); Xuanming ZHANG (University of Nottingham Ningbo China); Hao Feng (North China University of Science and Technology)

277: Blameworthiness in Security Games

Pavel Naumov (Claremont McKenna College)*; Jia Tao (Lafayette College)

280: Ranking-Based Semantics for Sets of Attacking Arguments

Bruno Yun (Univeristy of Aberdeen)*; Srdjan Vesic (CNRS); Madalina Croitoru (University of Montpellier)

291: Exploit and Replace: An Asymmetrical Two-Stream Architecture for Versatile Light Field Saliency Detection Yongri Piao (Dalian University of Technology); Zhengkun Rong (Dalian University of Technology); Miao Zhang (Dalian University of Technology)*; Huchuan Lu (Dalian University of Technology)

296: Cascading Convolutional Color Constancy

Huanglin Yu (South China University of Technology); Ke Chen (South China University of Technology)*; Kaiqi Wang (South China University of Technology); Yanlin Qian (Tampere University); Zhaoxiang Zhang (Chinese Academy of Sciences, China); Kui Jia (South China University of Technology)

300: V-PROM: A Benchmark for Visual Reasoning Using Visual Progressive Matrices

Damien Teney (University of Adelaide)*; Peng Wang (University of Wollongong); Jiewei Cao (The University of Adelaide); Lingqiao Liu (University of Adelaide); Chunhua Shen (University of Adelaide); Anton van den Hengel (University of Adelaide)

311: Accurate Structured-Text Spotting for Arithmetical Exercise Correction

Yiqing Hu (Tencent Youtu Lab)*; Yan Zheng (Tencent Youtu Lab); Hao Liu (Tencent Youtu Lab); Deqiang Jiang (Tencent Youtu Lab); Yinsong Liu (Tencent Youtu Lab); Bo Ren (Tencent Youtu Lab)

316: LT-GAN: Image Location Transfer using GAN

Sanbi Luo (iie.ac.cn)*; Tao Guo (iie.ac.cn); Jizhong Han (Institute of Information Engineering, Chinese Academy of Sciences); Fuqing Zhu (Institute of Information Engineering, Chinese Academy of Sciences)

331: Gated Fully Fusion for Semantic Segmentation

Xiangtai Li (Peking University)*; Houlong Zhao (Shandong University of Science and Technology); Lei Han (Tencent Al Lab); Yunhai Tong (Peking University); Shaohua Tan (Peking University); Kuiyuan Yang (DeepMotion)

337: Residual Neural Processes

ByungJun Lee (KAIST)*; Seunghoon Hong (KAIST); Kee-Eung Kim (KAIST)

345: TANet: Robust 3D Object Detection from Point Clouds with Triple Attention

Zhe Liu (Huazhong University of Science and Technology)*; Xin Zhao (Institute of Automation, Chinese Academy of Sciences); Tengteng Huang (Huazhong University of Science and Technology); hu ruolan (Huazhong University of Science and Technology); Yu Zhou (Huazhong University of Science and Technology); Xiang Bai (Huazhong University of Science and Technology)

361: Learning to Generate Maps from Trajectories

Sijie Ruan (Xidian University)*; Cheng Long (Nanyang Technological University); Jie Bao (JD Finance); Chunyang Li (Xidian University); Zisheng Yu (Xidian University); Ruiyuan Li (Xidian University; JD Finance); Yuxuan Liang (National University of Singapore); Tianfu He (Harbin Institute of Technology); Yu Zheng (JD Finance)

362: Unified Vision-Language Pre-Training for Image Captioning and VQA

Luowei Zhou (University of Michigan)*; Hamid Palangi (Microsoft Research); Lei Zhang (Microsoft); Houdong Hu (Microsoft AI and Research); Jason Corso (University of Michigan); Jianfeng Gao (Microsoft Research)

368: URNet: User-Resizable Residual Networks with Conditional Gating Module

Sangho Lee (Seoul National University); Simyung Chang (Seoul National University); Nojun Kwak (Seoul National University)*

378: Mis-classified Vector Guided Softmax Loss for Face Recognition

Xiaobo Wang (JD AI Research)*; Shifeng Zhang (CBSR, NLPR, CASIA); Shuo Wang (JD AI Research); Tianyu Fu (Winsense); Hailin Shi (JD AI); Tao Mei (AI Research of JD.com)

383: Reinforcement Learning from Imperfect Demonstrations under Soft Expert Guidance

Xiaojian Ma (University of California, Los Angeles)*; Mingxuan Jing (Tsinghua University); Wenbing Huang (Tsinghua University); Chao Yang (Tsinghua University); Fuchun Sun (Tsinghua); Huaping Liu (Tsinghua University); Bin Fang (Tsinghua University)

398: MULE: Multimodal Universal Language Embedding

Donghyun Kim (Boston University)*; Kuniaki Saito (Boston University); Kate Saenko (Boston University); Stan Sclaroff (Boston University); Bryan Plummer (Boston University)

402: Beyond Dropout: Feature Map Distortion to Regularize Deep Neural Networks

Yehui Tang (Peking University)*; Yunhe Wang (Huawei Noah's Ark Lab); Yixing Xu (Huawei Noah's Ark Lab); Boxin Shi (Peking University); Chao Xu (Peking University); Chunjing Xu (Huawei Noah's Ark Lab); Chang Xu (University of Sydney)

403: Pruning from Scratch

Yulong Wang (Tsinghua University); Xiaolu Zhang (Ant Financial Services Group); Lingxi Xie (Huawei Noah's Ark Lab); Jun Zhou (Ant Financial); Hang Su (Tsinghua Univiersity); Bo Zhang (Tsinghua University); Xiaolin Hu (Tsinghua University)*

409: Semi-Supervised Learning under Class Distribution Mismatch

Yanbei Chen (Queen Mary University of London)*; Xiatian Zhu (Samsung Al Centre, Cambridge); Wei Li (Queen Mary University of London); Shaogang Gong (Queen Mary University of London)

419: Learning Meta Model for Zero- and Few-shot Face Anti-spoofing

yunxiao qin (Northwestern Polytechnical University; AIBEE); Chenxu Zhao (AIBEE)*; Xiangyu Zhu (Chinese Academy of Science); Zezheng Wang (Aibee); Zitong Yu (CMVS, University of Oulu); Tianyu Fu (winsense); Feng Zhou (Aibee); jingping shi (Northwestern Polytechnical University); Zhen Lei (NLPR, CASIA, China)

434: RDSNet: A New Deep Architecture for Reciprocal Object Detection and Instance Segmentation Shaoru Wang (NLPR&UCAS); Yongchao Gong (Horizon Robotics); Junliang Xing (Institute of Automation, Chinese Academy of Sciences)*; Lichao Huang (Horizon Robotics); Chang Huang (Horizon Robotics); Weiming Hu (Institute of Automation, Chinese Academy of Sciences)

441: UCF-STAR: A Large-Scale Still Image Dataset for Understanding Human Actions

Marjaneh Safaei (University of Central Florida)*; Pooyan Balouchian (University of Central Florida); Hassan Foroosh (University of Central Florida)

443: Learning Transferable Adversarial Examples via Ghost Networks

Yingwei Li (Johns Hopkins University)*; Song Bai (University of Oxford); Yuyin Zhou (Johns Hopkins University); Cihang Xie (Johns Hopkins University); Zhishuai Zhang (Johns Hopkins University); Alan Yuille (Johns Hopkins University)

455: Pose-Assisted Multi-Camera Collaboration for Active Object Tracking
Jing Li (Peking University)*; Jing Xu (Peking University); Fangwei Zhong (Peking University); Xiangyu Kong (Peking University); Yu QIAO (Shanghai Jiao Tong University); Yizhou Wang (PKU)

467: Bi-objective Continual Learning: Learning `New' while Consolidating `Known' Xiaoyu Tao (Institute of Artificial Intelligence and Robotics, Xi'an Jiaotong University.)*; Xiaopeng Hong (Xi'an Jiaotong University); Xinyuan Chang (Xi'an Jiaotong University); Songlin Dong (Xi'an Jiaotong University); Yihong Gong (Xian Jiaotong University)

476: Beyond Unfolding: Exact Recovery of Latent Convex Tensor Decomposition under Reshuffling Chao Li (RIKEN)*; Mohammad Emtiyaz Khan (RIKEN); Zhun Sun (Horizon.ai); Gang Niu (RIKEN); Bo Han (RIKEN); Shengli Xie (Guangdong University of Technology); Qibin Zhao (RIKEN AIP)

481: A Spherical Convolution Approach for Learning Long Term Viewport Prediction in 360 Immersive Video Chenglei Wu (Tsinghua University)*; Ruixiao Zhang (Tsinghua University); Zhi Wang (Tsinghua University); Lifeng Sun (Tsinghua University)

482: Learning to Follow Directions in Street View

Karl Moritz Hermann (DeepMind); Mateusz Malinowski (DeepMind)*; Piotr Mirowski (DeepMind); Andras Banki-Horvath (DeepMind); Keith Anderson (DeepMind); Raia Hadsell (Deepmind)

484: Proximal Distilled Evolutionary Reinforcement Learning
Cristian Bodnar (University of Cambridge)*; Ben Day (University of Cambridge); Pietro Lió (University of Cambridge)

494: Re-Attention for Visual Question Answering

Wenya Guo (Nankai University); Ying ZHANG (Nankai University)*; Xiaoping Wu (Nankai University); Jufeng Yang (Nankai University); Xiaojie Yuan (Nankai University)

498: {Attention-based View Selection Networks for Light-field Disparity Estimation YU-JU TSAI (National Taiwan University)*; Yu-Lun Liu (National Taiwan University; MediaTek); Ming Ouhyoung (National Taiwan University); Yung-Yu Chuang (National Taiwan University)

504: Coupled-view Deep Classifier Learning from Multiple Noisy Annotators
Shikun Li (Chinese Academy of Sciences); Shiming Ge (Chinese Academy of Sciences)*; Yingying Hua (Chinese Academy of Sciences); Chunhui Zhang (Chinese Academy of Sciences); Hao Wen (CloudWalk Technology); Tengfei
Liu (Ant Financial Services Group); Weigiang Wang (Ant Financial)

509: Learning-based Efficient Graph Similarity Computation via Multi-Scale Convolutional Set Matching Yunsheng Bai (University of California, Los Angeles)*; Hao Ding (AWS AI Labs); Ken Gu (University of California, Los Angeles); Yizhou Sun (UCLA); Wei Wang (UCLA)

523: Learning to Transfer: Unsupervised Domain Translation via Meta-Learning
Jianxin Lin (University of Science and Technology of China); Yijun Wang (University of Science and Technology of China); Zhibo Chen (University of Science and Technology of China)*; Tianyu He (University of Science and Technology of China)

525: Leveraging Multi-view Image Sets for Unsupervised Intrinsic Image Decomposition and Highlight Separation Renjiao Yi (Simon Fraser University)*; Ping Tan (Simon Fraser University); Stephen Lin (Microsoft Research)

526: Logo-2K+: A Large-Scale Logo Dataset for Scalable Logo Classification

Jing Wang (Shandong Normal University); Weiqing Min (Institute of Computing Technology, Chinese Academy of Sciences); Sujuan Hou (Shandong Normal University)*; Shengnan Ma (Shandong Normal University); Yuanjie Zheng (Shandong Normal University); Haishuai Wang (Fairfield University, Department of Computer Science and Engineering); Shuqiang Jiang (ICT, China Academy of Science)

546: Efficient Automatic CASH via Rising Bandits

Yang Li (Peking University)*; Jiawei Jiang (ETH Zurich); Jinyang Gao (Alibaba Group); Yingxia Shao (BUPT); Ce Zhang (ETH); Bin Cui (Peking University)

551: Multi-Objective Multi-Agent Planning for Jointly Discovering and Tracking Mobile Objects Hoa Nguyen (The University of Adelaide)*; Hamid Rezatofighi (University of Adelaide); Ba-Ngu Vo (Curtin University); Damith Ranashinghe (The University of Adelaide)

552: Learning to Deblur Face Images via Sketch Synthesis

SongNan Lin (Beijing Institute of Technology); Jiawei Zhang (Sensetime Research)*; Jinshan Pan (Nanjing University of Science and Technology); Yicun Liu (Columbia University); Yongtian Wang (Beijing Institute of Technology); Jing Chen (Beijing Institute of Technology); Jimmy Ren (SenseTime Research)

558: ZoomNet: Part-Aware Adaptive Zooming Neural Network for 3D Object Detection Zhenbo Xu (University of Science and Technology of China); Wei Zhang (Baidu Inc); Xiaoqing Ye (baidu); Xiao Tan (Baidu Research); Wei Yang (University of Science and Technology of China)*; Shilei Wen (Baidu Research); Errui Ding (Baidu Inc.); Ajin Meng (University of Science and Technology of China); Liusheng Huang (University of Science and Technology of China)

561: Uncertainty-aware Multi-shot Knowledge Distillation for Image-based Object Re-identification
Xin Jin (University of Science and Technology of China); Cuiling Lan (Microsoft Research)*; Wenjun Zeng (Microsoft Research); Zhibo Chen (University of Science and Technology of China)

564: Channel Pruning Guided by Classification Loss and Feature Importance
Jinyang Guo (The University of Sydney)*; Wanli Ouyang (The University of Sydney); Dong Xu (University of Sydney)

572: Temporal Logics Over Finite Traces with Uncertainty

Fabrizio Maria Maggi (University of Tartu); Marco Montali (ree University of Bozen-Bolzan Italy); Rafael Penaloza (University of Milano-Bicocca)*

578: Real-time Scene Text Detection with Differentiable Binarization

Minghui Liao (Huazhong University of Science and Technology)*; Zhaoyi Wan (Megvii); Cong Yao (Megvii (Face++) Inc.); Kai Chen (situ); Xiang Bai (Huazhong University of Science and Technology)

589: FASTER Recurrent Networks for Efficient Video Classification

Linchao Zhu (University of Technology, Sydney); Du Tran (Facebook Research); Laura Sevilla-Lara (Facebook); Yi Yang (UTS); Matt Feiszli (Facebook Research); Heng Wang (Facebook Research)*

591: Learning from the Past: Continual Meta-Learning with Bayesian Graph Neural Networks Yadan Luo (University of Queensland)*; Zi Huang (University of Queensland); Zheng Zhang (Harbin Institute of Technology); Ziwei Wang (University of Queensland); Mahsa Baktashmotlagh (University of Queensland); Yang Yang (University of Electronic Science and Technology of China)

596: Visual-Tactile Fusion Object Clustering

Tao Zhang (Shenyang Institute of Automation Chinese Academy of Sciences)*; Yang Cong (Chinese Academy of Sciences); Gan Sun (Massachusetts Institute of Technology); Qianqian Wang (Xidian University); Zhengming Ding (Indiana University-Purdue University Indianapolis)

606: Policy Search by Target Distribution Learning for Continuous Control Chuheng Zhang (IIIS, THU)*; Yuanqi Li (IIIS, THU); Jian Li (Tsinghua University)

626: On the Anatomy of MCMC-Based Maximum Likelihood Learning of Energy-Based Models Erik Nijkamp (UCLA); Mitch Hill (UCLA Department of Statistics)*; Tian Han (Stevens Institute of Technology); Ying Nian Wu (University of California, Los Angeles); Song-Chun Zhu (UCLA)

647: Information Shaping for Enhanced Goal Recognition of Partially-Informed Agents
Sarah Keren (Harvard University)*; Haifeng Xu (Harvard University); Kofi Kwapong (Harvard University); David
Parkes (Harvard University); Barbara Grosz (Harvard University)

659: AutoShrink: A Topology-aware NAS for Discovering Efficient Neural Architecture Tunhou Zhang (Duke University)*; Hsin-Pai Cheng (Duke University); Zhenwen Li (Peking University); Feng Yan (University of Nevada, Reno); Chengyu Huang (Tsinghua University); Hai Li (Duke University); Yiran Chen (Duke University)

665: Clustering-aware Multiple Graph Matching via Decayed Pairwise Matching Composition
Tianzhe Wang (Shanghai Jiao Tong University); Zetian Jiang (Shanghai Jiao Tong University); Junchi Yan (Shanghai Jiao Tong University)*

669: Practical Federated Gradient Boosting Decision Trees
Qinbin Li (National University of Singapore)*; Zeyi Wen (The University of Western Australia); Bingsheng He (National University of Singapore)

682: Tree-Structured Policy based Progressive Reinforcement Learning for Temporally Language Grounding in Video

Jie Wu (Sun Yat-sen University)*; Guanbin Li (Sun Yat-sen University); si liu (Beihang University); Liang Lin (DarkMatter Al)

690: A MaxSAT-based Framework for Group Testing
Bishwamittra Ghosh (National University of Singapore)*; Lorenzo Ciampiconi (Politecnico di Milano); Jonathan
Scarlett (National University of Singapore); Kuldeep S Meel (National University of Singapore)

697: Hierarchical Knowledge Squeezed Adversarial Network Compression
Peng Li (Institute of Advanced Artificial Intelligence in Nanjing); changyong shu (Institute of Advanced Artificial Intelligence in Nanjing); Yuan Xie (East China Normal University)*; Yanyun Qu (XMU); Hui Kong (Nanjing University of Science and Technology)

715: SalSAC: A Video Saliency Prediction Model with Shuffled Attentions and Correlation-based ConvLSTM Xinyi Wu (University of South Carolina); Zhenyao Wu (University of South Carolina); jinglin zhang (Nanjing University of Information Science and Technology); Lili Ju (University of South Carolina); Song Wang (University of South Carolina)*

746: The Missing Data Encoder: Cross-Channel Image Completion with Hide-And-Seek Adversarial Network Arnaud Dapogny (Pierre and Marie Curie University (UPMC))*; Matthieu Cord (Sorbonne University); Patrick Pérez (Valeo.ai)

778: DATA-GRU: Dual-Attention Time-Aware Gated Recurrent Unit for Irregular Multivariate Time Series Qingxiong Tan (Department of Computer Science, Hong Kong Baptist University)*; Mang YE (Inception Institute of Artificial Intelligence); Baoyao Yang (Department of Computer Science, Hong Kong Baptist University); Siqi Liu (Department of Computer Science, Hong Kong Baptist University); Andy Jinhua Ma (School of Data and Computer Science, Sun Yat-Sen University); Terry Cheuk-Fung Yip (Department of Medicine and Therapeutics, The Chinese

University of Hong Kong); Grace Lai-Hung Wong (Department of Medicine and Therapeutics, The Chinese University of Hong Kong); PongChi Yuen (Department of Computer Science, Hong Kong Baptist University)

787: Cost-Effective Incentive Allocation via Structured Counterfactual Inference
Romain Lopez (UC Berkeley)*; Chenchen Li (Shanghai Jiao Tong University); Xiang Yan (Shanghai Jiao Tong
University); Junwu Xiong (Ant Financial Services Group); Michael Jordan (UC Berkeley); Yuan Qi (Ant Financial
Services Group); Le Song (Ant Financial Services Group)

792: VCG Under Sybil (False name) Attacks --- a Bayesian Analysis
Yotam Gafni (Technion)*; Ron Lavi (Technion); Moshe Tennenholtz (Technion – Israel Institute of Technology)

797: Complementary-View Multiple Human Tracking

Ruize Han (College of Intelligence and Computing, Tianjin University); Wei Feng (College of Intelligence and Computing, Tianjin University, China)*; Jiewen Zhao (College of Intelligence and Computing, Tianjin University); Zicheng Niu (Tianjin University); Yujun Zhang (Tianjin University); Liang Wan (College of Intelligence and Computing, Tianjin University); Song Wang (University of South Carolina)

825: FDN: Feature Decoupling Network for Head Pose Estimation
Hao Zhang (Zhejiang University); Mengmeng Wang (SenseTime Group Limited); Yong Liu (Zhejiang University)*; Yi
Yuan (NetEase Fuxi AI Lab)

831: Dynamical System Inspired Adaptive Time Stepping Controller for Residual Network Families
Yibo Yang (Peking University)*; Jianlong Wu (Shandong University); Hongyang Li (Peking University); Xia Li (Peking University Shenzhen Graduate School); Tiancheng Shen (Peking University); Zhouchen Lin (Peking University)

833: Region Normalization for Image Inpainting

Tao Yu (University of Science and Technology of China); Zongyu Guo (University of Science and Technology of China); Xin Jin (University of Science and Technology of China); Shilin Wu (University of Science and Technology of China); Zhibo Chen (University of Science and Technology of China)*; Weiping Li (University of Science and Technology of China); Zhizheng Zhang (University of Science and Technology of China); Sen Liu (University of Science and Technology of China)

837: Representation Learning with Multiple Lipschitz-constrained Alignments on Partially-labeled Cross-domain

Songlei Jian (NUDT)*; Liang Hu (University of Technology, Sydney); Longbing Cao (University of Technology Sydney); Kai Lu (NUDT)

838: Refining HTN Methods via Task Insertion with Preferences

Zhanhao Xiao (Sun Yat-sen University)*; Hai Wan (School of Data and Computer Science, Sun Yat-sen University); Hankz Hankui Zhuo (Sun Yat-sen University); Andreas Herzig (IRIT Université de Toulouse); Laurent Perrussel (University of Toulouse Capitole 1); Peilin Chen (School of Data and Computer Science, Sun Yat-sen University)

858: Gradient-Aware Model-based Policy Search

Pierluca D'Oro (Politecnico di Milano, NNAISENSE)*; Alberto Maria Metelli (Politecnico di Milano); Andrea Tirinzoni (Politecnico di Milano); Matteo Papini (Politecnico di Milano); Marcello Restelli (Politecnico di Milano)

870: Infrared-Visible Cross-Modal Person Re-Identification with an X Modality Diangang Li (Xi'an Jiaotong University); Xing Wei (Xi'an Jiaotong University); Xiaopeng Hong (Xi'an Jiaotong University)*; Yihong Gong (Xi'an Jiaotong University)

893: Text Perceptron: Towards End-to-End Arbitrary-Shaped Text Spotting

Liang Qiao (Hikvision Research Institute); Sanli Tang (Hikvision Research Institute); Zhanzhan Cheng (Hikvision Research Institute)*; Yunlu Xu (Hikvision Research Institute); Yi Niu (Hikvision Research Institute); Shiliang Pu (Hikvision Research Institute); Fei Wu (Zhejiang University)

896: Multi-label Causal Feature Selection

Xingyu Wu (University of Science and Technology of China); Bingbing Jiang (School of Computer Science and Technology, University of Science and Technology of China); Kui Yu (School of Computer and Information, Hefei University of Technology); Huanhuan Chen (School of Computer Science and Technology, University of Science and Technology of China)*; Chunyan Miao (NTU)

898: Automated Synthesis of Social Laws in STRIPS
Ronen Nir (Technion)*; Alexander Shleyfman (Technion); Erez Karpas (Technion)

900: Attractive or Faithful? Popularity-Reinforced Learning for Inspired Headline Generation YunZhu Song (National Chiao Tung University)*; Hong-Han Shuai (National Chiao Tung University); Sung-Lin Yeh (National Tsing Hua University); Yi-Lun Wu (National Chiao Tung University); Lun-Wei Ku (Academia Sinica); Wen-Chih Peng (National Chiao Tung University)

902: Aspect-Aware Multimodal Summarization for Chinese E-commerce Products
Haoran Li (JD Al Research)*; Peng Yuan (JD Al Research); Song Xu (JD Al Research); Youzheng Wu (JD Al Research); Xiaodong He (JD Al Research); Bowen Zhou (JD)

904: Layerwise Sparse Coding for Pruned Deep Neural Networks with Extreme Compression Ratio Xiao Liu (Nanjing University)*; Wenbin Li (Nanjing University); Jing Huo (Nanjing University); Lili Yao (Nanjing University); Yang Gao (Nanjing University)

909: Geometry Sharing Network for 3D Point Cloud Classification and Segmentation
Mingye Xu (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences); Zhipeng Zhou (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences); Yu Qiao (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences)*

923: A Framework for Engineering Human/Agent Teaming Systems Rick Evertsz (RMIT University)*; John Thangarajah (RMIT University)

930: Separate In Latent Space: Unsupervised Single Image Layer Separation Yunfei Liu (Beihang University); Feng Lu (Beihang University)*

935: Loss-based Attention for Deep Multiple Instance Learning

Xiaoshuang Shi (University of Florida)*; Fuyong Xing (University of Colorado Denver); Yuanpu Xie (University of Florida); Zizhao Zhang (University of Florida); Lei Cui (Northwest University); Lin Yang (University of Florida)

947: Estimating Early Fundraising Performance of Innovations via Graph-based Market Environment Model Likang Wu (University of Science and Technology of China)*; Zhi Li (University of Science and Technology of China); Hongke Zhao (Tianjin University); Zhen Pan (University of Science and Technology of China); Qi Liu ("University of Science and Technology of China); Enhong Chen (University of Science and Technology of China)

951: Multi-Label Classification with Label Graph Superimposing
Ya Wang (Peking University); Dongliang He (Baidu); Fu Li (Baidu); Xiang Long (Baidu); Zhichao Zhou (Baidu); Jinwen
Ma (Peking University)*; Shilei Wen (Baidu Research)

961: PedHunter: Occlusion Robust Pedestrian Detector in Crowded Scenes

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962: Relational Learning for Joint Head and Human Detection

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1025: CFGNN: Cross Flow Graph Neural Networks for Question Answering on Complex Tables Xuanyu Zhang (Beijing Normal University)*

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1070: Document Summarization with VHTM: Variational Hierarchical Topic-Aware Mechanism Xiyan Fu (College of Computer Science, Nankai University)*; Jun Wang (Ludong University); Jinghan Zhang (College of Computer Science, Nankai University); Jinmao Wei (Nankai University); Zhenglu Yang (Nankai University)

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1194: Minimizing the Bag-of-Ngrams Difference for Non-Autoregressive Neural Machine Translation Chenze Shao (Institute of Computing Technology, Chinese Academy of Sciences (ICT/CAS))*; Jinchao Zhang (Tencent); Yang Feng (Institute of Computing Technology, Chinese Academy of Sciences); Fandong Meng (Tencent WeChat AI - Pattern Recognition Center Tencent Inc.); Jie Zhou (Tencent)

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1246: Reliability Does Matter: An End-to-End Weakly Supervised Semantic Segmentation Approach Bingfeng Zhang (Xi'an Jiaotong-Liverpool University); Jimin Xiao (Xi'an Jiaotong-Liverpool University)*; Yunchao Wei (UTS); MINGJIE SUN (Xi'an Jiaotong-Liverpool University); Kaizhu Huang (Xi'an Jiaotong-Liverpool Univ.)

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1273: Attribute Propagation Network for Graph Zero-shot Learning LU LIU (University of Technology Sydney)*; Tianyi Zhou (University of Washington); Guodong Long (University of Technology Sydney); Jing Jiang (University of Technology Sydney); Chengqi Zhang (University of Technology Sydney)

1276: An Adversarial Perturbation Oriented Domain Adaptation Approach for Semantic Segmentation Jihan Yang (Sun Yat-sen University)*; Ruijia Xu (Sun Yat-sen University); Ruiyu Li (Tencent); Xiaojuan Qi (University of Oxford); Xiaoyong Shen (Tencent); Guanbin Li (Sun Yat-sen University); Liang Lin (DarkMatter Al)

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1281: SADA: Semantic Adversarial Diagnostic Attacks for Autonomous Applications Abdullah Hamdi (KAUST)*; Matthias Müller (Intel Labs); Bernard Ghanem (KAUST)

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1309: Revisiting Online Quantum State Learning

Feidiao Yang (Institute of Computing Technology, Chinese Academy of Sciences)*; Jiaqing Jiang (Institute of Computing Technology, Chinese Academy of Sciences); Jialin Zhang (Institute of Computing Technology, CAS); Xiaoming Sun (Institute of Computing Technology, Chinese Academy of Sciences)

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1404: Revisiting Bilinear Pooling: A Coding Perspective Zhi Gao (Beijing Institute of Technology); Yuwei WU (Beijing Institute of Technology (BIT), China)*; Xiaoxun Zhang (Alibaba Group); Jindou Dai (Beijing Institute of Technology); Yunde Jia (Beijing Institute of Technology); Mehrtash Harandi (Monash University)

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1407: Single Camera Training for Person Re-identification

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1424: Graph Attention Based Proposal 3D ConvNets for Action Detection

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1435: Image Cropping with Composition and Saliency Aware Aesthetic Score Map

Yi Tu (Shanghai Jiao Tong University); Li Niu (Shanghai Jiao Tong University)*; Weijie Zhao (Versa-AI); Dawei Cheng (Shanghai Jiao Tong University); Liqing Zhang (Shanghai Jiao Tong University)

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1495: SPSTracker: Sub-Peak Suppression of Response Map for Robust Object Tracking Qintao Hu (University of Chinese Academy of Sciences, China)*; Lijun Zhou (Chinese Academy of Sciences); Xiaoxiao Wang (University of California Davis); Yao Mao (IOE); Jianlin Zhang (IOE); Qixiang Ye (University of Chinese Academy of Sciences, China)

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1509: Knowledge Integration Networks for Action Recognition
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1513: Arena: A General Evaluation Platform and Building Toolkit for Multi-Agent Intelligence Yuhang Song (University of Oxford); Andrzej Wojcicki (Lighthouse); Thomas Lukasiewicz (University of Oxford); Jianyi Wang (BUAA); Abi Aryan (UCLA); Zhenghua Xu (Hebei University of Technology)*; Mai Xu (BUAA); Zihan Ding (Imperial College London); Lianlong Wu (University of Oxford)

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Akinori Tanaka (RIKEN/Keio Univ.); Akiyoshi Sannai (RIKEN); Ken Kobayashi (Fujitsu Laboratories LTD.)*; Naoki Hamada (Fujitsu Laboratories LTD.)

1536: Posterior-Guided Neural Architecture Search

Yizhou Zhou (University of Science and Technology of China)*; Xiaoyan Sun (Microsoft Research Asia); Chong Luo (Microsoft Research Asia); Zheng-Jun Zha (University of Science and Technology of China); Wenjun Zeng (Microsoft Research)

1540: Brain-mediated Transfer Learning of Convolutional Neural Networks
Satoshi Nishida (Center for Information and Neural Networks (CiNet), National Institute of Information and
Communications Technology)*; Yusuke Nakano (Center for Information and Neural Networks (CiNet), National

Institute of Information and Communications Technology); Antoine Blanc (Center for Information and Neural Networks (CiNet), National Institute of Information and Communications Technology); Naoya Maeda (NTT DATA Corporation); Masataka Kado (NTT DATA Corporation); Shinji Nishimoto (Center for Information and Neural Networks (CiNet), National Institute of Information and Communications Technology)

1545: Learning Saliency-free Model with Generic Features for Weakly-supervised Semantic Segmentation Wenfeng Luo (Sun Yat-Sen University)*; Meng Yang (Sun Yat-sen University)

1547: A Multiarmed Bandit Based Incentive Mechanism for a Subset Selection of Customers for Demand Response in Smart Grids

Shweta Jain (Indian Institute of Technology Ropar)*; Sujit Gujar (Machine Learning Laboratory, International Institute of Information Technology, Hyderabad)

1551: Learning End-To-End Scene Flow by Distilling Single Tasks Knowledge

Filippo Aleotti (University of Bologna); Matteo Poggi (University of Bologna)*; Fabio Tosi (University of Bologna); Stefano Mattoccia (University of Bologna)

1552: Adversarial Domain Adaptation with Domain Mixup

Minghao Xu (Shanghai Jiaotong University)*; Jian Zhang (Shanghai Jiaotong University); Bingbing Ni (Shanghai Jiao Tong University); Teng Li (Anhui University); Chengjie Wang (Tencent); Qi Tian (Huawei Noah's Ark Lab); Wenjun Zhang (Shanghai Jiao Tong University)

1555: Object Instance Mining for Weakly Supervised Object Detection

Chenhao Lin (SenseTime Research)*; Siwen Wang (Dalian University of Technology); Dongqi Xu (SenseTime Research); Yu Lu (SenseTime Research); Wayne Zhang (SenseTime Research)

1557: Hierarchical Online Instance Matching for Person Search

Di Chen (Nanjing University of Science and Technology)*; Shanshan Zhang (Nanjing University of Science and Technology); Wanli Ouyang (The University of Sydney); Jian Yang (Nanjing University of Science and Technology); Bernt Schiele (MPI Informatics)

1559: Deep Camouflage Images

Qing Zhang (Sun Yat-sen University)*; Gelin Yin (Sun Yat-sen University); Yongwei Nie (South China University of Technology); WEI-SHI ZHENG (Sun Yat-sen University, China)

1572: Random Erasing Data Augmentation

Zhun Zhong (Xiamen University)*; Liang Zheng (Australian National University); Guoliang Kang (CMU); Shaozi Li (Xiamen University, China); Yi Yang (UTS)

1576: Pointwise Rotation-invariant Network with Adaptive Sampling and 3D Spherical Voxel Convolution Yang You (Shanghai Jiao Tong University); Yujing Lou (Shanghai Jiao Tong University); Qi Liu (Shanghai Jiao Tong University); Yu-Wing Tai (Tencent); weiming wang (shanghai Jiaotong university); Lizhuang Ma (Shanghai Jiao Tong University); Cewu Lu (Shanghai Jiao Tong University)*

1581: Lifted Fact-Alternating Mutex Groups and Pruned Grounding of Classical Planning Problems Daniel Fišer (FEE, CTU, Prague)*

1590: Lexical Simplification with Pretrained Encoders

Jipeng Qiang (Yangzhou University); Yun Li (Yangzhou University)*; Yi Zhu (hefei university of technology); Yunhao Yuan (Yangzhou University); Xindong Wu (School of Compute Science and Information Engineering, HeFei University of Technology)

1591: Learning Cross-modal Context Graph Networks for Visual Grounding

Yongfei Liu (ShanghaiTech)*; Bo Wan (ShanghaiTech University); Xiaodan Zhu (Department of Electrical and Computer Engineering, Queen's University); Xuming He (ShanghaiTech University)

1598: Partner Selection for the Emergence of Cooperation in Multi-Agent Systems using Reinforcement Learning Nicolas Anastassacos (The Alan Turing Institute)*; Steve Hailes (University College London); Mirco Musolesi (UCL)

1602: Generative-Discriminative Complementary Learning

Yanwu Xu (University of Pittsburgh)*; Mingming Gong (University of Melbourne); Junxiang Chen (University of Pittsburgh); Tongliang Liu (The University of Sydney); Kun Zhang (Carnegie Mellon University); Kayhan Batmanghelich (University of Pittsburgh / Carnegie Mellon University)

1603: An Iterative Polishing Framework based on Quality Aware Masked Language Model for Chinese Poetry Generation

Liming DENG (Ping An Technology (Shenzhen) Co., Ltd.)*; Jie Wang (PingAn Technology); Hangming Liang (Ping An Technology (Shenzhen) Co., Ltd.); Hui Chen (Ping An Technology (Shenzhen) Co., Ltd.); Zhiqiang Xie (University of Science and Technology of China); Bojin Zhuang (Ping An Technology (Shenzhen) Co., Ltd.); Shaojun Wang (Ping An Technology (Shenzhen) Co., Ltd.); Jing Xiao (Ping An Insurance (Group) Company of China)

1604: Modeling Probabilistic Commitments for Maintenance Is Inherently Harder than for Achievement Qi Zhang (University of Michigan)*; Edmund Durfee (University of Michigan); Satinder Singh (UMich)

1623: Neural Machine Translation with Byte-Level Subwords
Changhan Wang (Facebook AI Research)*; Kyunghyun Cho (New York University); Jiatao Gu (Facebook AI Research)

1625: Constructing Minimal Perfect Hash Functions Using SAT Technology Sean Weaver (U.S. National Security Agency); Marijn Heule (Carnegie Mellon University)*

1627: A Multi-Scale Approach for Graph Link Prediction Lei Cai (Washington State University); Shuiwang Ji (Texas A&M University)*

1629: AutoDAL: Distributed Active Learning with Automatic Hyperparameter Selection Xu Chen (SAS Inc)*; Brett Wujek (SAS)

1632: General Partial Label Learning via Dual Bipartite Graph Autoencoder
Brian Chen (Columbia University); Bo Wu (Columbia University); Alireza Zareian (Columbia University); Hanwang
Zhang (Nanyang Technological University); Shih-Fu Chang (Columbia University)*

1634: Multi-Task Self-Supervised Learning for Disfluency Detection Shaolei Wang (Harbin Institute of Technology)*; Wanxiang Che (Research Center for Social Computing and Information Retrieval, Harbin Institute of Technology); Qi Liu (University of Oxford); Pengda Qin (Beijing University of Posts and Telecommunications); Ting Liu (哈尔滨工业大学); William Yang Wang (UC Santa Barbara)

1648: Spatial-Temporal Multi-Cue Network for Continuous Sign Language Recognition
Hao Zhou (University of Science and Technology of China)*; Wengang Zhou (University of Science and Technology of China); Yun Zhou (University of Science and Technology of China); Houqiang Li (University of Science and Technology of China)

1650: Adaptive Factorization Network: Learning Adaptive-Order Feature Interactions Weiyu Cheng (Shanghai Jiao Tong University); Yanyan Shen (Shanghai Jiao Tong University)*; Linpeng Huang (Shanghai Jiao Tong University)

1655: Divide and Conquer: Question-Guided Spatio-Temporal Contextual Attention for Video Question Answering

Jianwen Jiang (Tsinghua University)*; Ziqiang Chen (Tsinghua University); Haojie Lin (Tsinghua University); Xibin Zhao (Tsinghua University); Yue Gao (Tsinghua University)

1658: Release the power of online-training for robust visual tracking

Yifan Yang (UCAS)*; Guorong Li (University of Chinese Academy of Sciences); Yuankai Qi (University of Adelaide); Qingming Huang (University of Chinese Academy of Sciences)

1664: RiskOracle: A Minute-level Citywide Traffic Accident Forecasting Framework

Zhengyang Zhou (University of Science and Technology of China); Yang Wang (University of Science and Technology of China)*; Xike Xie (University of Science and Technology of China); Lianliang Chen (University of Science and Technology of China); Hengchang Liu (USTC)

1673: Deep Object Co-segmentation via Spatial-Semantic Network Modulation

Kaihua Zhang (NUIST)*; Jin Chen (nuist); Bo Liu (JD.com); Qingshan Liu (Nanjing University of Information Science & Technology)

1680: Uncorrected least-squares temporal difference with lambda-return Takayuki Osogami (IBM Research - Tokyo)*

1681: Generating Persona Consistent Dialogues by Exploiting Natural Language Inference Haoyu Song (Research Center for Social Computing and Information Retrieval, Harbin Institute of Technology)*; Wei-Nan Zhang (Harbin Institute of Technology); Jingwen Hu (Research Center for Social Computing and Information Retrieval, Harbin Institute of Technology, China); Ting Liu (哈尔滨工业大学)

1685: Dynamic Sampling Network for Semantic Segmentation

Bin Fu (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences); Junjun He (SJTU); Zhengfu Zhang (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences); Yu Qiao (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences)*

1687: Stochastic Online Learning with Probabilistic Graph Feedback

Shuai Li (Shanghai Jiao Tong University)*; Wei Chen (Microsoft); Zheng Wen (DeepMind); Kwong-Sak LEUNG (The Chinese University of Hong Kong)

1690: Binarized Neural Architecture Search

Hanlin Chen (Beihang University); Li'an Zhuo (Beihang University); Baochang Zhang (Beihang University)*; Xiawu Zheng (Xiamen University); Jianzhuang Liu (Shenzhen Institutes of Advanced Technology); David Doermann (University at Buffalo); Rongrong Ji (Xiamen University, China)

1692: Convergence of Opinion Diffusion is PSPACE-complete

Dmitry Chistikov (University of Warwick); Grzegorz Lisowski (University of Warwick); Mike Paterson (University of Warwick); Paolo Turrini (University of Warwick)*

1698: Towards Socially Responsible AI: Cognitive Bias-Aware Multi-Objective Learning Procheta Sen (Dublin City University)*; Debasis Ganguly (IBM Research)

1703: Adversarial Deep Network Embedding for Cross-network Node Classification

Xiao Shen (Hong Kong Polytechnic University)*; Quanyu Dai (Hong Kong Polytechnic University); Korris Chung (Hong Kong Polytechnic University); wei lu (University of electronic science and technology of China); Kup-Sze Choi (The Hong Kong Polytechnic University)

1706: Dynamic Instance Normalization for Arbitrary Style Transfer

Yongcheng Jing (Zhejiang University); Xiao Liu (Baidu); Yukang Ding (Baidu Research); Xinchao Wang (Stevens Institute of Technology); Errui Ding (Baidu Inc.); Mingli Song (Zhejiang University)*; Shilei Wen (Baidu Research)

1710: Adaptive Two-Dimensional Embedded Image Clustering

Zhihui Li (University of New South Wales)*; Lina Yao (University of New South Wales); Sen Wang (The University of Queensland); salil kanhere (UNSW Sydney); Xue Li (University of Queensland); Huaxiang Zhang (Shandong Normal University)

1718: Rank3DGAN: Semantic mesh generation using relative attributes

Yassir Saquil (University of Bath)*; Qunce Xu (University of Bath); Yongliang Yang (University of Bath); Peter Hall (University of Bath)

1741: Corpus wide argument mining - a working solution

Liat Ein-Dor (IBM Research AI); Eyal Shnarch (IBM Research AI); Lena Dankin (IBM Research AI); Alon Halfon (IBM Research AI)*; Benjamin Sznajder (IBM Research AI); Ariel Gera (IBM research AI); Carlos Alzate (IBM Research, Ireland); Martin Gleize (IBM Research); Leshem Choshen (IBM Research AI); Yufang Hou (IBM Research); Yonatan Bilu (Haifa Lab, IBM Research); Ranit Aharonov (Haifa Lab, IBM Research); Noam Slonim (IBM)

1743: Probing Brain Activation Patterns by Dissociating Semantics and Syntax in Sentences Shaonan Wang (CASIA)*; Jiajun Zhang (Institute of Automation Chinese Academy of Sciences); Nan Lin (Institute of Psychology Chinese Academy of Sciences); Chengqing Zong ("Institute of Automation, Chinese Academy of Sciences")

1752: Temporal Context Enhanced Feature Aggregation for Video Object Detection

Fei He (Institue of Automation, Chinese Academy of Sciences; University of Chinese Academy of Sciences)*; Naiyu Gao (Institue of Automation, Chinese Academy of Sciences; University of Chinese Academy of Sciences); Qiaozhe Li (Chinese Academy of Sciences); Senyao Du (Horizon Robotics); Xin Zhao (Institute of Automation, Chinese Academy of Sciences); Kaiqi Huang (Institute of Automation, Chinese Academy of Sciences)

1753: Message Passing Attention Networks for Document Understanding Giannis Nikolentzos (Ecole Polytechnique); Antoine Tixier (Ecole Polytechnique)*; Michalis Vazirgiannis (École Polytechnique)

1758: Learning to Optimize Computational Resources: Frugal Training with Generalization Guarantees Maria-Florina Balcan (Carnegie Mellon University); Tuomas Sandholm (Carnegie Mellon University); Ellen Vitercik (Carnegie Mellon University)*

1759: Structured Output Learning with Conditional Generative Flows You Lu (Virginia Tech)*; Bert Huang (Virginia Tech)

1768: Privacy-Preserving Gaussian Process Regression - A Modular Approach to the Application of Homomorphic Encryption

Peter Fenner (IBM Research)*; Edward Pyzer-Knapp (IBM Research)

1770: On Succinct Groundings of HTN Planning Problems

Gregor Behnke (Ulm University)*; Daniel Höller (Ulm University); Alexander Schmid (Ulm University); Pascal Bercher (Ulm University); Susanne Biundo (Ulm University)

1771: Detecting Human-Object Interactions via Functional Generalization

Ankan Bansal (University of Maryland)*; Sai Saketh Rambhatla (University of Maryland); Abhinav Shrivastava (University of Maryland); Rama Chellappa (University of Maryland)

1773: Envelope-based Approaches to Real-Time Heuristic Search

Kevin Gall (University of New Hampshire)*; Bence Cserna (University of New Hampshire); Wheeler Ruml (University of New Hampshire)

1777: Computing Equilibria in Binary Networked Public Goods Games

Sixie Yu (Washington University in St. Louis)*; Kai Zhou (Washington University in St. Louis); P. Jeffrey Brantingham (UCLA); Yevgeniy Vorobeychik (Washington University in St. Louis)

1783: Corpus-Level End-to-End Exploration for Interactive Systems
Zhiwen Tang (Georgetown University)*; Grace Hui Yang (Georgetown University)

1788: Beyond Pairwise Comparisons in Social Choice: A Setwise Kemeny Aggregation Problem Hugo Gilbert (Gran Sasso Science Institute, Italy)*; Tom Portoleau (LAAS); Olivier Spanjaard (Sorbonne Université)

1790: Adversarial Learning of Privacy-Preserving and Task-Oriented Representations
Taihong Xiao (University of California at Merced)*; Yi-Hsuan Tsai (NEC Labs America); Kihyuk Sohn (Google);
Manmohan Chandraker (NEC Labs America); Ming-Hsuan Yang (University of California at Merced)

1796: Preventing Arbitrage From Collusion When Eliciting Probabilities
Rupert Freeman (Microsoft Research)*; David Pennock (Microsoft Research); Dominik Peters (University of Oxford); Bo Waggoner (U. Colorado, Boulder)

1797: Label Error Correction and Generation Through Label Relationships
Zijun Cui (Rensselaer Polytechnic Institute)*; Yong Zhang (Tencent Al Lab); Qiang Ji (Rensselaer Polytechnic Institute)

1798: Clouseau: Generating Communication Protocols from Commitments
Munindar Singh (North Carolina State University)*; Amit Chopra (Lancaster University)

1807: OVL: One-View Learning for Human Retrieval Wenjing Li (University of Science and Technology of China)*; Zhongcheng Wu (University of Science and Technology of China)

1813: Expectation-Aware Planning: A General Framework for Synthesizing and Executing Self-Explaining Plans for Human-Al Interaction

Sarath Sreedharan (Arizona State University)*; Tathagata Chakraborti (IBM Research AI); Christian Muise (IBM Research); Subbarao Kambhampati (Arizona State University)

1829: Cycle-CNN for Colorization towards Real Monochrome-Color Camera Systems

Xuan Dong (School of Computer Science, Beijing University of Posts and Telecommunications); Weixin Li (Beihang University)*; Xiaojie Wang (Beijing University of Posts and Telecommunications); Yunhong Wang (State Key Laboratory of Virtual Reality Technology and System, Beihang University, Beijing 100191, China)

1830: Systematically exploring associations among multivariate data Lifeng Zhang (Renmin University of China)*

1833: CBNet:A Novel Composite Backbone Network Architecture for Object Detection Yudong Liu (Peking University); Yongtao Wang (Peking University)*; Siwei Wang (Peking University); Tingting Liang (Peking University); Qijie Zhao (Peking University); Zhi Tang (Peking University); Haibin Ling (Stony Brook University)

1834: Leveraging Multi-token Entities in Document-level Named Entity Recognition
Anwen Hu (Renming University of China)*; Zhicheng Dou (Remin University, China); Ji-Rong Wen (Renmin University of China); Jian-Yun Nie (Université de Montréal)

1836: Multi-Task Driven Feature Models for Thermal Infrared Tracking

Qiao Liu (Harbin Institute of Technology, Shenzhen); Xin Li (Harbin Institute of Technology, Shenzhen); Zhenyu He (Harbin Institute of Technology (Shenzhen); Peng Cheng Laboratory)*; Nana Fan (Harbin Institute of Technology Shenzhen); Di Yuan (Harbin Institute of Technology, Shenzhen; Monash University); Wei Liu (liuwei@sziit.edu.cn); Yongsheng Liang (Harbin Institute of Technology)

1846: Improving Domain-Adapted Sentiment Classification by Deep Adversarial Mutual Learning Qianmin Xue (East China Normal University); Wei Zhang (East China Normal University)*; Hongyuan Zha (GEORGIA TECH)

1848: Generate, Segment and Refine: Towards Generic Manipulation Segmentation
Peng Zhou (University of Maryland)*; Bor-Chun Chen (University of Maryland); Xintong Han (Malong
Technologies); Mahyar Najibi (University of Maryland); Abhinav Shrivastava (University of Maryland); Ser-Nam Lim
(Facebook AI); Larry Davis (University of Maryland)

1856: Unsupervised Nonlinear Feature Selection from High-dimensional Signed Networks
Qiang Huang (Jilin University)*; TingYu Xia (Jilin University); HuiYan Sun (Jilin University); Makoto Yamada (RIKEN
AIP / Kyoto University); Yi Chang (Jilin University)

1857: Towards Ghost-free Shadow Removal via Dual Hierarchical Aggregation Network and Shadow Matting GAN Xiaodong Cun (University of Macau); Chi-Man Pun (University of Macau)*; Shi cheng (Xi'an University of Technology)

1888: Topic Enhanced Sentiment Spreading Model in Social Networks Considering User Interest Xiaobao Wang (Tianjin University)*; Di Jin (Tianjin University); Kaska Musial-Gabrys (University of Technology Sydney); Jianwu Dang (Tianjin University)

1894: Multi-Point Semantic Representation for Intent Classification
Jinghan Zhang (College of Computer Science, Nankai University)*; Yuxiao Ye (Alibaba Group); Yue Zhang (Westlake University); Likun Qiu (Ludong University); Bin Fu (Alibaba Group); Yang Li (Alibaba Group); Zhenglu Yang (Nankai University); Jian Sun (Alibaba Group)

1897: GBCNs: Genetic Binary Convolutional Networks for Enhancing the Performance of 1-bit DCNNs Chunlei Liu (Beihang University); Wenrui Ding (Beihang University); Yuan Hu (Beihang University); Baochang Zhang (Beihang University)*; Jianzhuang Liu (Shenzhen Institutes of Advanced Technology); Guodong Guo (Baidu)

1907: Reinforcing Neural Network Stability with Attractor Dynamics
Hanming Deng (Shanghai Jiao Tong University); Yang Hua (Queen's University Belfast); Tao Song (Shanghai Jiao Tong University)*; Zhengui Xue (Shanghai Jiao Tong University); Ruhui Ma (Shanghai Jiao Tong University); Neil Robertson (Queen's University Belfast); Haibing Guan (Shanghai Jiao Tong University)

1917: Scalable methods for computing state similarity in deterministic Markov Decision Processes Pablo Samuel Castro (Google)*

1924: Peeking Behind the Ordinal Curtain: Improving Distortion via Cardinal Queries
Georgios Amanatidis (Sapienza University of Rome); Georgios Birmpas (University of Oxford); Aris Filos Ratsikas (University of Liverpool); Alexandros Voudouris (University of Oxford)*

1933: Intention Nets: Psychology-inspired User Choice Behavior Modeling for Next-basket Prediction Shoujin Wang (Macquarie University, Australia)*; Liang Hu (University of Technology, Sydney); Yan Wang (Macquarie University, Austrilia); Quan Z. Sheng (Macquarie University); Mehmet Orgun (Macquarie University); Longbing Cao (University of Technology Sydney)

1950: AutoRemover: Automatic Object Removal for Autonomous Driving Videos
Rong Zhang (Zhejiang University); Wei Li (Baidu); Peng Wang (Baidu USA LLC.); Chenye Guan (Baidu); Jin Fang
(Baidu); Yuhang Song (USC); Jinhui Yu (Zhejiang Unviersity); Baoquan Chen (Peking University); Weiwei Xu
(Zhejiang unviersity)*; Yang Ruigang (Baidu)

1964: Training Decision Trees as Replacement for Convolution Layers
Wolfgang Fuhl (University of Tuebingen)*; Gjergji. Kasneci (University of Tuebingen); Wolfgang Rosenstiel
(University of Tuebingen); Enkelejda Kasneci (University of Tuebingen)

1971: Importance-Aware Semantic Segmentation in Self-Driving with Discrete Wasserstein Training Xiaofeng Liu (CMU)*; Song Bai (UC Berkeley); Yuzhuo Han (DLTU); Yi Ge (Carnegie Mellon University); Tianxing Wang (Fudan); Xu Han (Johns Hopkins University); Site Li (Carnegie Mellon University); Jane You (HK Poly U); jun Lu (Beth Israel Deaconess Medical Center)

1972: Adaptive Cross-modal Embeddings for Image-Text Alignment JONATAS WEHRMANN (PUCRS)*; Rodrigo Barros (PUCRS); Camila Kolling (PUCRS)

1980: An ADMM Based Framework for AutoML Pipeline Configuration
Sijia Liu (IBM Research); Parikshit Ram (IBM Research)*; Deepak Vijaykeerthy (IBM Research); Djallel Bouneffouf
(IBM Research); Gregory Bramble (IBM Research); Horst Samulowitz (IBM Research); Dakuo Wang (IBM Research);
Andrew Conn (IBM); Alexander Gray (IBM)

2005: Less Is Better: Unweighted Data Subsampling via Influence Function Zifeng Wang (Tsinghua-Berkeley Shenzhen Institute, Tsinghua University)*; Hong Zhu (Huawei Noah's Ark Lab); Zhenhua Dong (Huawei Noah's Ark Lab); Xiuqiang He (Huawei Noah's Ark Lab); Shao-Lun Huang (Tsinghua-Berkeley Shenzhen Institute, Tsinghua University)

2006: Price of Fairness in Budget Division and Probabilistic Social Choice Marcin Michorzewski (University of Warsaw); Dominik Peters (University of Oxford)*; Skowron Piotr (University of Warsaw)

2012: Random Fourier Features via Fast Surrogate Leverage Weighted Sampling Fanghui Liu (Shanghai Jiao Tong University)*; Xiaolin Huang (Shanghai Jiao Tong University); Yudong Chen (Cornell University); Jie Yang (Shanghai Jiao Tong University); Johan Suykens (KU Leuven)

2014: Hyperbolic Interaction Model for Hierarchical Multi-Label Classification
Boli Chen (Beijing Jiaotong University)*; Xin Huang (Beijing Jiaotong University); Lin Xiao (Beijing Jiaotong University); Zixin Cai (Beijing Jiaotong University); Liping Jing (Beijing Jiaotong University)

2016: Projective Quadratic Regression for Online Learning Wenye Ma (Tencent)*

2023: Object-Guided Instance Segmentation for Biological Images
Jingru Yi (Computer Science, Rutgers)*; Hui Tang (Tecent Medical Al Lab); Pengxiang Wu (Computer Science,
Rutgers); Bo Liu (JD.com); Daniel J. Hoeppner (Astellas Research Institute of America); Dimitris Metaxas (Rutgers);
Lianyi Han (Tencent America); Wei Fan (Tencent)

2032: Associative Variational Auto-encoder with Distributed Latent Spaces and Associators
Dae Ung Jo (Seoul National University); ByeongJu Lee (Seoul National University); Jongwon Choi (Samsung SDS);
Haanju Yoo (Samsung Research); Jin Young Choi (Seoul National University)*

2038: ABSent: Cross-Lingual Sentence Representation Mapping with Bidirectional GANs

Zuohui Fu (Rutgers University); Yikun Xian (Rutgers University); Shijie Geng (Rutgers University); Yingqiang Ge (Rutgers University); Yuting Wang (Rutgers University); Xin Dong (Rutgers University); Guang Wang (Rutgers University); Gerard de Melo (Rutgers University)*

2041: Particle Filter Recurrent Neural Networks

Xiao Ma (National University of Singapore)*; Peter Karkus (National University of Singapore); David Hsu (NUS); Wee Sun Lee (National University of Singapore)

2046: Joint Modeling of Local and Global Temporal Dynamics for Multivariate Time Series Forecasting with Missing Values

Xianfeng Tang (The Pennsylvania State University)*; Huaxiu Yao (Pennsylvania State University); Yiwei Sun (Penn State University); Charu Aggarwal (IBM); Prasenjit Mitra (Pennsylvania State University); Suhang Wang (Pennsylvania State University)

2051: Cross-Modality Paired-Images Generation for RGB-Infrared Person Re-Identification Guan'an Wang (Chinese Academy of Sciences)*; Tianzhu Zhang (University of Science and Technology of China); Yang Yang (Institute of Automation, Chinese Academy of Sciences); Jian Cheng ("Chinese Academy of Sciences, China"); Jianlong Chang (National Laboratory of Pattern Recognition, Institute of Automation, Chinese Academy of Sciences); Zengguang Hou (Chinese Academy of Sciences)

2063: Zero-Shot Sketch-based Image Retrieval via Graph Convolution Network
Zhaolong Zhang (Fudan University)*; Yuejie Zhang (Fudan University); Rui Feng (Fudan University); Tao Zhang
(Shanghai University of Finance and Economics); Weiguo Fan (University of Iowa)

2066: Morphing and Sampling Network for Dense Point Cloud Completion
Minghua Liu (UCSD)*; Lu Sheng (Beihang University); Sheng Yang (Tsinghua University); Jing Shao (Sensetime);
Shimin Hu (Tsinghua University)

2068: Person Tube Retrieval via Language Description Hehe Fan (UTS)*; Yi Yang (University of Technology, Sydney)

2069: SG-Net: Syntax-Guided Machine Reading Comprehension

Zhuosheng Zhang (Shanghai Jiao Tong University)*; Yuwei Wu (Shanghai Jiao Tong University); Junru Zhou (Shanghai Jiao Tong University); Sufeng Duan (Shanghai Jiao Tong University); Hai Zhao (Shanghai Jiao Tong University); Rui Wang (National Institute of Information and Communications Technology)

2072: Semantics-aware BERT for Language Understanding

Zhuosheng Zhang (Shanghai Jiao Tong University)*; Yuwei Wu (Shanghai Jiao Tong University); Hai Zhao (Shanghai Jiao Tong University); Zuchao Li (Shanghai Jiao Tong University); Shuiliang Zhang (Shanghai Jiao Tong University); Xi Zhou (CloudWalk Technology); Xiang Zhou (CloudWalk Technology)

2073: Light Multi-segment Activation for Model Compression

Zhenhui Xu (Peking University)*; Guolin Ke (Microsoft Research); Jia Zhang (Microsoft Research); Jiang Bian (Microsoft Research); Tieyan Liu (Microsoft Research)

2075: Overcoming Catastrophic Forgetting by Neuron-level Plasticity Control Inyoung Paik (Deep Bio Inc.); Sangjun Oh (Deep Bio Inc.); Tae-Yeong Kwak (Deep Bio Inc.); Injung Kim (Handong Global University)*

2078: Cross-Modality Attention with Semantic Graph Embedding for Multi-Label Classification Renchun You (baidu)*; Zhiyao Guo (Xiamen University); Cui Lei (Tsinghua University); Xiang Long (Baidu); Yingze Bao (Baidu USA LLC); Shilei Wen (Baidu Research)

2085: Weakly-Supervised Video Moment Retrieval via Semantic Completion Network Zhijie Lin (Zhejiang University)*; Zhou Zhao (Zhejiang University); Zhu Zhang (Zhejiang University); Qi Wang (Alibaba Inc.); Huasheng Liu (Alibaba Inc.)

2087: Parsing as Pretraining

David Vilares (Universidade da Coruña)*; Michalina Strzyz (Universidade da Coruña); Anders Søgaard (University of Copenhagen); Carlos Gómez-Rodríguez (Universidade da Coruña)

2096: Weakly-Supervised Opinion Summarization by Leveraging External Information Chao Zhao (UCSC)*; Snigdha Chaturvedi (UC Santa Cruz)

2099: From Few to More: Large-scale Dynamic Multiagent Curriculum Learning Weixun Wang (Tianjin University); Tianpei Yang (Tianjin University)*; Yong Liu (Nanjing University); Jianye Hao (Tianjin University); Xiaotian Hao (Tianjin University); Yujing Hu (NetEase Fuxi Al Lab); Yingfeng Chen (NetEase Fuxi Al Lab); Changjie Fan (NetEase Fuxi Al Lab); Yang Gao (Nanjing University)

2100: On the Discrepancy between the Theoretical Analysis and Practical Implementations of Compressed Communication for Distributed Deep Learning

Aritra Dutta (King Abdullah University of Science and Technology (KAUST))*; El houcine Bergou (INRA-KAUST); Ahmed M. Abdelmoniem (KAUST); Chen-Yu Ho (KAUST); Atal Sahu (KAUST); Marco Canini (KAUST); Panos Kalnis (King Abdullah University of Science and Technology)

2107: Attention-over-Attention Field-aware Factorization Machine

Zhibo Wang (Wuhan University)*; Jinxin Ma (Wuhan University); Yongquan Zhang (Wuhan University); Qian Wang (Wuhan University); Ju Ren (Central South University); Peng Sun (Zhejiang University)

2108: RefNet: A Reference-aware Network for Background Based Conversation
Chuan Meng (Shandong University)*; Pengjie Ren (University of Amsterdam); Zhumin Chen (Shandong University);
Christof Monz (University of Amsterdam); Jun Ma (Shandong University); Maarten de Rijke (University of Amsterdam)

2109: Discontinuous Constituent Parsing with Pointer Networks
Daniel Fernández-González (Universidade da Coruña)*; Carlos Gómez-Rodríguez (Universidade da Coruña)

2111: POP ≡ POCL, right? --- Complexity Results for Partial Order (Causal Link) Makespan Minimization Pascal Bercher (Ulm University)*; Conny Olz (Ulm University)

2116: High Tissue Contrast MRI Synthesis Using Multi-Stage Attention-GAN for Glioma Segmentation Mohammad Hamghalam (Shenzhen University)*; Baiying Lei (Shenzhen university); tianfu Wang (Shenzhen university)

2119: Where to Go Next: Modeling Long- and Short-Term User Preferences for Point-of-Interest Recommendation Ke Sun (Wuhan University); Tieyun Qian (Wuhan University); Tong Chen (The University of Queensland); Yile Liang (Wuhan University); Hung Nguyen Quoc Viet (Griffith University); Hongzhi Yin (The University of Queensland)*

2122: TrueLearn: A Family of Bayesian Algorithms to Match Lifelong Learners to Open Educational Resources Sahan Bulathwela (University College London)*; Maria Perez-Ortiz (University College London); Emine Yilmaz (University College London); John Shawe-Taylor (University College London)

2126: Learning from positive and unlabeled data without explicit estimation of class prior Chenguang Zhang (Tianjin University)*; Yuexian Hou (Tianjin University); Yan Zhang (Hainan University)

2128: Path Planning Problems with Side Observations - When Colonels Play Hide-and-Seek

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2138: Deep Domain-Adversarial Image Generation for Domain Generalisation

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2140: Temporal Planning with Intermediate Conditions and Effects

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2149: Double-Oracle Sampling Method for Stackelberg Equilibrium Approximation in General-Sum Extensive-Form

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2150: Efficient Model-Based Diagnosis of Sequential Circuits

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2158: Towards Interpretation of Pairwise Learning

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2162: Multiagent Evaluation Mechanisms

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2165: RoadTagger: Robust Road Attribute Inference with Graph Neural Networks

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2166: Hybrid Graph Neural Networks for Crowd Counting

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2172: Graph Few-shot Learning via Knowledge Transfer

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2180: SK-Net: Deep Learning on Point Cloud via End-to-end Discovery of Spatial Keypoints Weikun Wu (Xiamen University); Yan Zhang (Xiamen University); david Wang (Ohio State University); Yunqi Lei (Xiamen university)*

2192: Learning Long- and Short-Term User Literal-Preference with Multimodal Hierarchical Transformer Network for Personalized Image Caption

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2193: Uncertainty-Aware Search Framework for Multi-Objective Bayesian Optimization
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2195: Linear Context Transform Block

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2214: MetaLight: Value-based Meta-reinforcement Learning for Traffic Signal Control Xinshi Zang (Shanghai Jiao Tong University)*; Huaxiu Yao (Pennsylvania State University); Guanjie Zheng (Pennsylvania State University); Nan Xu (University of Southern California); Kai Xu (Shanghai Tianrang Intelligent Technology Co., Ltd); Zhenhui (Jessie) Li (Penn State University)

2215: Ladder Loss for Coherent Visual-Semantic Embedding

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2217: Hashing based Answer Selection

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2220: GMAN: A Graph Multi-Attention Network for Traffic Prediction

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2226: Patchy Image Structure Classification Using Multi-Orientation Region Transform Xiaohan Yu (Griffith University, Australia)*; Yang Zhao (Griffith University); Yongsheng Gao (Griffith university, Australia); Shengwu Xiong (Wuhan University of Technology); Xiaohui Yuan (Wuhan University of Technology, China)

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2247: Adaptive Quantitative Trading: an Imitative Deep Reinforcement Learning Approach Yang Liu (University of Science and Technology of China)*; Qi Liu ("University of Science and Technology of China, China"); Hongke Zhao (Tianjin University); Zhen Pan (University of Science and Technology of China); Chuanren Liu (The University of Tennessee Knoxville)

2254: Find Objects and Focus on Highlights: Mining Object Semantics for Video Highlight Detection via Graph Neural Networks

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2261: Towards Cross-modality Medical Image Segmentation with Online Mutual Knowledge Distillation Kang Li (CUHK); Lequan Yu (CUHK)*; Shujun Wang (the Chinese University of Hong Kong); Pheng-Ann Heng (The Chinese University of Hong Kong)

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2263: Neural Architecture Search using Deep Neural Networks and Monte Carlo Tree Search Linnan Wang (Brown University)*; Yiyang Zhao (Worcester Polytechnic Institute); Yuu Jinnai (Brown University); Yuandong Tian (Facebook); Rodrigo Fonseca (Brown University)

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2306: Finding Good Subtrees for Constraint Optimization Problems Using Frequent Pattern Mining Hongbo Li (College of Information Science and Technology, Northeast Normal University)*; Jimmy Lee (Chinese University of Hong Kong); He Mi (Northeast Normal University); Minghao Yin (northeast normal university)

2307: Learning General Latent-Variable Graphical Models with Predictive Belief Propagation Borui Wang (Stanford University)*; Geoffrey Gordon ((Carnegie Mellon University))

2311: Solving Sequential Text Classification as Board-Game Playing

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2312: Learning Agent Communication under Limited Bandwidth by Message Pruning

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2313: Neighborhood Cognition Consistent Multi-Agent Reinforcement Learning

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2317: Grapy-ML: Graph Pyramid Mutual Learning for Cross-dataset Human Parsing

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2318: SMIX(\$\lambda\$): Enhancing Centralized Value Functions for Cooperative Multi-Agent Reinforcement Learning

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2320: Lifelong Spectral Clustering

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2343: Order Matters: Semantic-Aware Neural Networks for Binary Code Similarity Detection

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2347: KPNet: Towards Minimal Face Detector

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2362: SSAH: Semi-supervised Adversarial Deep Hashing with Self-paced Hard Sample Generation Sheng Jin (Harbin Institute of Technology)*; Shangchen Zhou (Nanyang Technological University); Yao Liu (Alibaba Group); Chao Chen (zhejiang university); Xiaoshuai Sun (Xiamen University); Hongxun Yao (Harbin Institute of Technology); Xian-Sheng Hua (Alibaba Group)

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2377: Interactive Rare-Category-of-Interest Mining from Large Datasets

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2379: OOGAN: Disentangling GAN with One-Hot Sampling and Orthogonal Regularization

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2405: Bi-level Actor-Critic for Multi-agent Coordination

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2416: Multi-Agent Game Abstraction via Graph Attention Neural Network

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2425: Estimating Stochastic Linear Combination of Non-linear Regressions

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2441: Exchangeable Feature Alignment for Arbitrary Style Transfer

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2445: F3Net: Fusion, Feedback and Focus for Salient Object Detection

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2522: Region Focus Network for Joint Optic Disc and Cup Segmentation
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2613: Potential Passenger Flow Prediction: A Novel Study for Urban Transportation Development Yongshun Gong (University of Technology Sydney)*; Zhibin Li (University of Technology Sydney); Jian Zhang (UTS); Wei Liu (UTS); Jinfeng Yi (JD Research)

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2736: Rethinking the Bottom-Up Framework for Query-based Video Localization Long Chen (Zhejiang University)*; Chujie Lu (Zhejiang University); Siliang Tang (Zhejiang University); Jun Xiao (Zhejiang University); Dong Zhang (Nanjing University of Science and Technology); Chilie Tan (Tongdun Technology); Xiaolin Li (Tongdun Technology)

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2761: Learning to Match on Graph for Fashion Compatibility Modeling Xun Yang (National University of Singapore)*; Xiaoyu Du (National University of Singapore); Meng Wang (Hefei University of Technology)

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2771: DCMN+: Dual Co-Matching Network for Multi-choice Reading Comprehension Shuiliang Zhang (Shanghai Jiao Tong University)*; Hai Zhao (Shanghai Jiao Tong University); Yuwei Wu (Shanghai Jiao Tong University); Zhuosheng Zhang (Shanghai Jiao Tong University); Xi Zhou (CloudWalk Technology); Xiang Zhou (CloudWalk Technology)

2772: Enhancing Personalized Trip Recommendation with Attractive Routes

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2775: Reasoning on Knowledge Graphs with Debate Dynamics

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2776: Domain Conditioned Adaptation Network

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2778: End-to-End Thorough Body Perception for Person Search

Kun Tian (Horizon Robotics)*; Houjing Huang (CASIA); Yun Ye (Beijing horizon information technology Co., Ltd.); Shiyu Li (Horizon Robotics); Jinbin Lin (Horizon Robotics); Guan Huang (Institute of Automation, Chinese Academy of Sciences)

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2796: A Variational Autoencoder with Deep Embedding Model for Generalized Zero-Shot Learning Peirong Ma (Guangzhou University); Xiao Hu (Guangzhou University)*

2801: Distributed Stochastic Gradient Descent with Event-Triggered Communication Jemin George (Army Research Laboratory)*; Prudhvi Gurram (Booz Allen Hamilton)

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2804: High Performance Depthwise and Pointwise Convolutions on Mobile Devices
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2813: Learning to Optimize Variational Quantum Circuits to Solve Combinatorial Problems
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2824: AtLoc: Attention Guided Camera Localization

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2836: Differentiable Grammars for Videos

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2840: Learning Graph Convolutional Network for Skeleton-based Human Action Recognition by Neural Searching Wei Peng (CMVS, University of Oulu)*; Xiaopeng Hong (Xi'an Jiaotong University); Haoyu Chen (University of Oulu); Guoying Zhao (University of Oulu)

2853: Importance-Aware Learning for Neural Headline Editing
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2863: Efficient Heterogeneous Collaborative Filtering without Negative Sampling for Recommendation Chong Chen (Tsinghua University)*; Min Zhang (Tsinghua University); Yongfeng Zhang (Rutgers University); Weizhi Ma (Tsinghua University); Yiqun LIU (Tsinghua University); Shaoping Ma (Tsinghua University)

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2888: On the Generation of Medical Question-Answer Pairs

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2895: STEP: Spatial Temporal Graph Convolutional Networks for Emotion Perception from Gaits Uttaran Bhattacharya (University of Maryland, College Park)*; Trisha Mittal (University of Maryland); Rohan Chandra (University of Maryland); Tanmay Randhavane (The University of North Carolina at Chapel Hill); Aniket Bera (The University of North Carolina at Chapel Hill); Dinesh Manocha (UMD)

2899: Regional Tree Regularization for Interpretability in Deep Neural Networks
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2901: Generalized and Sub-Optimal Bipartite Constraints for Conflict-Based Search Thayne Walker (University of Denver)*; Nathan Sturtevant (University of Alberta); Ariel Felner (BGU)

2913: A Generalized Framework for Edge-preserving and Structure-preserving Image Smoothing

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2914: Plug-In, Trainable Gate for Streamlining Arbitrary Neural Networks Jaedeok Kim (Samsung Research)*; Chiyoun Park (Samsung Research); HyunJoo Jung (Samsung Research); Yoonsuck Choe (Texas A&M University)

2920: LCD: Learned Cross-Domain Descriptors for 2D-3D Matching Quang-Hieu Pham (Singapore University of Technology and Design)*; Mikaela Angelina Uy (Stanford University); Binh-Son Hua (The University of Tokyo); Thanh Nguyen (Deakin University, Australia); Gemma Roig (SUTD, MIT); Sai-Kit Yeung (Hong Kong University of Science and Technology)

2925: Relation Network for Person Re-identification
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2928: Towards Query-Efficient Black-Box Adversary with Zeroth-Order Natural Gradient Descent Pu Zhao (Northeastern University)*; Pin-Yu Chen (IBM Research); Siyue Wang (Northeastern University); Xue Lin (Northeastern University)

2930: Co-occurrence Estimation from Aggregated Data with Auxiliary Information Tomoharu Iwata (NTT)*; Naoki Marumo (NTT)

2932: Towards Certificated Model Robustness Against Weight Perturbations
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2940: Appearance and Motion Enhancement for Video-based Person Re-identification Shuzhao Li (Zhejiang University)*; Huimin Yu (TBD); Haoji Hu (Zhejiang University, China)

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2994: FlowScope: Spotting Money Laundering Based on Graphs

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2997: Solving Set Cover and Dominating Set via Partial MaxSAT

Zhendong Lei (State Key Laboratory of Computer Science, Institute of Software, Chinese Academy of Sciences School of Computer and Control Engineering, University of Chinese Academy of Sciences); Shaowei Cai (Institute of Software, Chinese Academy of Sciences)*

2998: MIPaaL: Mixed Integer Program as a Layer

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3001: Idle Time Optimization for Target Assignment and Path Finding in Sortation Centers

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3007: Fastened CROWN: Tightened Neural Network Robustness Certificates

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3008: FusionDN: A Unified Densely Connected Network for Image Fusion

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3016: Rethinking the Image Fusion: A Fast Unified Image Fusion Network based on Proportional Maintenance of Gradient and Intensity

Hao Zhang (Wuhan University); Han Xu (Wuhan University); Yang Xiao (Huazhong Univ. of Sci.&Tech.); Xiaojie Guo (Tianjin University); Jiayi Ma (Wuhan University)*

3019: Learning Hierarchy-Aware Knowledge Graph Embeddings for Link Prediction

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3032: Spiking-YOLO: Spiking Neural Network for Energy-Efficient Object Detection

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3037: Absum: Simple Regularization Method for Reducing Structural Sensitivity of Convolutional Neural Networks

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3062: Fair Procedures for Fair Stable Marriage Outcomes

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3066: Unsupervised Domain Adaptation on Reading Comprehension Yu Cao (University of Sydney)*; Meng Fang (Tencent Al Lab); Joey Tianyi Zhou (Institute of High Performance Computing, A*STAR); Baosheng Yu (University of Sydney)

3070: AdaCare: Explainable Clinical Health Status Representation Learning via Scale-Adaptive Feature Extraction and Recalibration

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3076: Going Deep: Graph Convolutional Ladder-Shape Networks
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3077: Quadruply Stochastic Gradient Method for Large Scale Nonlinear Semi-Supervised Ordinal Regression AUC Optimization

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3081: Safe Sample Screening for Robust Support Vector Machine zhai zhou (Nanjing University of Information Science & Technology)*; Xiang Li (Western University); Bin Gu (Nanjing University of Information Science & Technology)

3084: Exact and Efficient Inference for Collective Flow Diffusion Model via Minimum Convex Cost Flow Algorithm Yasunori Akagi (NTT Service Evolution Laboratories, NTT Corporation)*; Takuya Nishimura (NTT Data Corporation); Yusuke Tanaka (NTT); Takeshi Kurashima (NTT Corporation); Hiroyuki Toda (NTT)

3089: Divide-and-Conquer Learning with Nystr\"{o}m: Optimal Rate and Algorithm
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3091: Off-Policy Evaluation in Partially Observable Environments Guy Tennenholtz (Technion)*; Uri Shalit (Technion); Shie Mannor ()

3093: Effective Data Augmentation with Multi-Domain Learning GANs Shin'ya Yamaguchi (NTT)*; Sekitoshi Kanai (NTT Software Innovation Center/Keio University); Takeharu Eda (NTT)

3096: Computing Team-Maxmin Equilibria in Zero-Sum Multiplayer Extensive-Form Games

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3100: Domain Generalization Using a Mixture of Multiple Latent Domains
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3106: Causally Denoise Word Embeddings Using Half-Sibling Regression Zekun Yang (City University of Hong Kong)*; Tianlin Liu (Jacobs University Bremen)

3118: Model and Reinforcement Learning for Markov Games with Risk Preferences
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3138: Deep Discriminative CNN with Temporal Ensembling for Ambiguously-Labeled Image Classification Yao Yao (Nanjing University of Science and Technology)*; Jiehui Deng (Nanjing University of Science and Technology); Xiuhua Chen (Nanjing University of Science and Technology); Chen Gong (Nanjing University of Science and Technology); Jianxin Wu (Nanjing University); Jian Yang (Nanjing University of Science and Technology)

3142: Attentive User-Engaged Adversarial Neural Network for Community Question Answering Yuexiang Xie (Peking University)*; Ying Shen (Peking University Shenzhen Graduate School); Yaliang Li (Alibaba Group); Min Yang (Chinese Academy of Sciences); Kai Lei (peking university)

3143: Gradient Boosts the Approximate Vanishing Ideal Hiroshi Kera (The University of Tokyo)*; Yoshihiko Hasegawa (The University of Tokyo)

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3174: LTLf Synthesis with Fairness and Stability Assumptions
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3176: Relation-Aware Pedestrian Attribute Recognition with Graph Convolutional Networks Zichang Tan (NLPR); Yang Yang (Institute of Automation, Chinese Academy of Sciences); Jun Wan (NLPR, CASIA)*; Guodong Guo (West Virginia University); Stan Li (National Lab. of Pattern Recognition, China)

3183: Scalable Probabilistic Matrix Factorization with Graph-Based Priors

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3184: Graph-based Transformer with Cross-candidate Verification for Semantic Parsing Bo Shao (Sun Yat-sen University, SYSU)*; Yeyun Gong (Microsoft Research Asia); Weizhen Qi (University of Science and Technology of China); Guihong Cao (Microsoft); Jianshu Ji (Microsoft); Xiaola Lin (Sun Yat-sen University, SYSU)

3186: Balancing Spreads of Influence in a Social Network

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3194: CAWA: An Attention-Network for Credit Attribution
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3209: Dynamic Reward-based Dueling Deep Dyna-Q: Robust Policy Learning in Noisy Environments Yangyang Zhao (South China University of Technology); zhenyu wang (South China University of Technology)*; Kai Yin (South China University of Technology); Rui Zhang (South China University of Technology); zhenhua huang (South China University of Technology)

3210: Explaining Propagators for String Edit Distance Constraints
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3214: Planar Prior Assisted PatchMatch Multi-View Stereo

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3217: Learning Inverse Depth Regression for Multi-View Stereo with Correlation Cost Volume Qingshan Xu (Huazhong University of Science and Technology); Wenbing Tao (Huazhong University of Science and Technology)*

3218: Real-Time Object Tracking via Meta-Learning: Efficient Model Adaptation and One-Shot Channel Pruning Ilchae Jung (POSTECH)*; Kihyun You (POSTECH); Hyeonwoo Noh (POSTECH); Minsu Cho (POSTECH); Bohyung Han (Seoul National University)

3219: Symmetrical Synthesis for Deep Metric Learning Geonmo Gu (NAVER corp); ByungSoo Ko (NAVER)*

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3229: Norm-Explicit Quantization: Improving Vector Quantization for Maximum Inner Product Search Xinyan Dai (The Chinese University of Hong Kong); Xiao Yan (The Chinese University of Hong Kong)*; Kelvin K. W. Ng (The Chinese University of Hong Kong); Jie Liu (The Chinese University of Hong Kong); James Cheng (CUHK)

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3247: Measuring and Relieving the Over-smoothing Problem for Graph Neural Networks from the Topological View Deli Chen (Peking University)*; Yankai Lin (Wechat Tencent); Wei Li (Peking University); Peng Li (Wechat Tencent); Jie Zhou (Tencent); Xu Sun (Peking University)

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3254: Unsupervised Neural Dialect Translation with Commonality and Diversity Modeling Yu Wan (NLP2CT Lab, University of Macau)*; Baosong Yang (University of Macau); Derek Wong (Natural Language Processing & Portuguese & Chinese Machine Translation Lab, Department of Computer and Information Science, University of Macau); Lidia S. Chao (University of Macau); Haihua Du (University of Macau); Ben C.H. Ao (NLP2CT)

3261: Weakly-Supervised Video Re-Localization with Multiscale Attention Model Yung-Han Huang (National Taiwan University)*; Kuang-Jui Hsu (Qualcomm); Shyh-Kang Jeng (National Taiwan University); Yen-Yu Lin (National Chiao Tung University)

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3274: Towards Accurate Low Bit-width Quantization with Multiple Phase Adaptations
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3277: Global Context-Aware Progressive Aggregation Network for Salient Object Detection Zuyao Chen (University of Chinese Academy of Sciences)*; Qianqian Xu (Key Laboratory of Intelligent Information Processing, Institute of Computing Technology, Chinese Academy of Sciences); Runmin Cong (Beijing Jiaotong University); Qingming Huang (University of Chinese Academy of Sciences)

3278: Aggregated Learning: A Vector-Quantization Approach to Learning Neural Network Classifiers Masoumeh Soflaei Shahrbabak (University of Ottawa)*; Hongyu Guo (National Research Council Canada); Ali Al-Bashabsheh (Big Data and Brain Computing, Beihang University); Yongyi Mao (University of Ottawa); Richong Zhang ("Beihang University, China")

3279: Mechanism Design with Predicted Task Revenue for Bike Sharing Systems
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3285: ODIN: ODE-Informed Regression for Parameter and State Inference in Time-Continuous Dynamical Systems Philippe Wenk (ETH Zurich)*; Gabriele Abbati (University of Oxford); Michael A. Osborne (University of Oxford); Bernhard Schölkopf (Max Planck Institute for Intelligent Systems); Andreas Krause (ETH Zürich); Stefan Bauer (MPI IS)

3296: Capturing Sentence Relations for Answer Sentence Selection with Multi-Perspective Graph Encoding Zhixing Tian (Institute of Automation, Chinese Academy of Sciences; University of Chinese Academy of Sciences)*; Yuanzhe Zhang (Institute of Automation, Chinese Academy of Sciences); Xinwei Feng (Baidu Inc.); Wenbin Jiang (Baidu Inc.); Yajuan Lyu (Baidu Inc.); Kang Liu (Institute of Automation, Chinese Academy of Sciences); Jun Zhao (Institute of Automation, Chinese Academy of Sciences)

3304: Multiple Birds with One Stone: Beating 1/2 for EFX and GMMS via Envy Cycle Elimination Georgios Amanatidis (Sapienza University of Rome); Vangelis Markakis (Athens University of Economics and Business)*; Apostolos Ntokos (Athens University of Economics and Business)

3314: Random Intersection Graphs and Missing Data Dror Salti (Ben Gurion University of The Negev)*; Yakir Berchenko (Ben Gurion University of The Negev)

3316: DIANet: Dense-and-Implicit Attention Network zhongzhan huang (Tsinghua University); Senwei Liang (National University of Singapore); Mingfu Liang (Northwestern University); Haizhao Yang (Purdue University)*

3320: Spatial-Temporal Gaussian Scale Mixture Modeling for Foreground Estimation
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3321: A Causal Inference Method for Reducing Gender Bias in Word Embedding Relations Zekun Yang (City University of Hong Kong)*; Juan Feng (City University of Hong Kong)

3324: PI-RCNN: An Efficient Multi-sensor 3D Object Detector with Point-based Attentive Cont-conv Fusion Module Liang Xie (Zhejiang University)*; Chao Xiang (Zhejiang University); Zhengxu Yu (Zhejiang University); Guodong Xu (Zhejiang University); Zheng Yang (FABU); Deng Cai (ZJU); Xiaofei He (Zhejiang University)

3325: Boundary Enhanced Neural Span Classification for Nested Named Entity Recognition Chuanqi Tan (Alibaba Inc.)*; Wei Qiu (Alibaba inc); Mosha Chen (DAMO Academy, Alibaba Group); Rui Wang (Alibaba Group); Fei Huang (Alibaba)

3329: Coarse Correlation in Extensive-Form Games Gabriele Farina (Carnegie Mellon University)*; Tommaso Bianchi (Politecnico di Milano); Tuomas Sandholm (Carnegie Mellon University)

3330: Graph-Based Reasoning over Heterogeneous External Knowledge for Commonsense Question Answering Shangwen Lv (Institute of Information Engineering, Chinese Academy of Sciences)*; Daya Guo (Sun-Yat Sen University); Jingjing Xu (Peking University); Duyu Tang (Microsoft Research); Nan Duan (Microsoft Research); Ming Gong (Microsoft Research and Al Group); Linjun Shou (STCA NLP Group, Microsoft, Beijing); Daxin Jiang (Microsoft, Beijing, China); Guihong Cao (Microsoft); Songlin Hu (Institute of Information Engineering, Chinese Academy of Sciences)

3333: Hypothetical Answers to Continuous Queries over Data Streams Luis Cruz-Filipe (University of Southern Denmark)*; Graça Gaspar (Faculty of Sciences, University of Lisbon); Isabel Nunes (Faculty of Sciences, University of Lisbon) 3339: Maximum Margin Multi-Dimensional Classification

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3351: A Frank-Wolfe Framework for Efficient and Effective Adversarial Attacks

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3353: Learning Sparse Sharing Architectures for Multiple Tasks

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3355: CASE: Context-Aware Semantic Expansion

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3356: Defending with Shared Resources on a Network

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3364: On Performance Estimation in Automatic Algorithm Configuration

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3369: MTSS: Learn from Multiple Domain Teachers and Become a Multi-domain Dialogue Expert Shuke Peng (Zhejiang University); Feng Ji (Alibaba Inc.); Zehao Lin (Zhejiang University); Shaobo Cui (Alibaba Inc.); Haiqing Chen (Alibaba Inc.); Yin Zhang (Zhejiang University)*

3373: An Ordinal Data Clustering Algorithm with Automated Distance Learning Yiqun Zhang (Hong Kong Baptist University); Yiu-ming CHEUNG (Hong Kong Baptist University)*

3380: Maximum Likelihood Embedding of Logistic Random Dot Product Graphs Luke O'connor (Harvard University); Muriel Medard (MIT); Soheil Feizi (University of Maryland)*

3390: Augmenting the Power of (Partial) MaxSat Resolution with Extension Francisco Larrosa (Universitat Politècnica de Catalunya)*; Emma Rollon (Universitat Politècnica de Catalunya)

3401: Improving the Robustness of Wasserstein Embedding by Adversarial PAC-Bayesian Learning 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)

3409: Refining Tournament Solutions via Margin of Victory
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3422: Unsupervised Domain Adaptation via Discriminative Manifold Embedding and Alignment You-Wei Luo (Sun Yat-sen University); Chuan-Xian Ren (Sun Yat-Sen University)*; Pengfei Ge (Sun Yat-Sen University); Ke-Kun Huang (Jiaying University); Yu-Feng Yu (Guangzhou University)

3426: Memory Augmented Graph Neural Networks for Sequential Recommendation

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3429: Distributionally Robust Counterfactual Risk Minimization

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3430: Improved PAC-Bayesian Bounds for Linear Regression

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3433: Online Active Learning of Reject Option Classifiers

Kulin Shah (International Institute of Information Technology, Hyderabad); Naresh Manwani (International Institute of Information Technology, Hyderabad)*

3435: Interpretable and Differentially Private Predictions

Frederik Harder (Max Planck Institute)*; Matthias Bauer (MPI Tübingen); Mijung Park (MPI Tuebingen)

3436: On Measuring and Mitigating Biased Inferences of Word Embeddings

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3445: Persuading Voters: It's Easy to Whisper, It's Hard to Speak Loud

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3450: Private Bayesian Persuasion with Sequential Games

Andrea Celli (Politecnico di Milano)*; Stefano Coniglio (University); Nicola Gatti (Politecnico di Milano)

3455: Deep Bayesian Nonparametric Learning of Rules and Plans from Demonstrations with a Learned Automaton

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3461: Modeling Dialogues with Hashcode Representations: A Nonparametric Approach

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3463: Weighted Automata Extraction from Recurrent Neural Networks via Regression on State Spaces Takamasa Okudono (National Institute of Informatics)*; Masaki Waga (National Institute of Informatics); Taro Sekiyama (National Institute of Informatics); Ichiro Hasuo (National Institute of Informatics & SOKENDAI)

3465: Transductive Ensemble Learning for Neural Machine Translation

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3470: FET-GAN: Font Effect Transfer via K-shot Adaptive Instance Normalization Wei Li (Zhejiang University)*; Yongxing He (Zhejiang University); Yanwei Qi (Zhejiang University); Zejian Li (Zhejiang University); Yongchuan Tang (Zhejiang University, Zhejiang Lab)

3476: Finding Needles in a Moving Haystack: Prioritizing Alerts with Adversarial Reinforcement Learning Liang Tong (Washington University in Saint Louis)*; Aron Laszka (University of Houston); Chao Yan (Vanderbilt UNIVERSITY); Ning Zhang (Washington University in St. Louis); Yevgeniy Vorobeychik (Washington University in St. Louis)

3482: HirePeer: Impartial Peer-Assessed Hiring at Scale in Expert Crowdsourcing Markets Yasmine Kotturi (Carnegie Mellon University)*; Anson Kahng (Carnegie Mellon University); Ariel Procaccia (Carnegie Mellon University); Chinmay Kulkarni (Carnegie Mellon University)

3488: Contiguous Cake Cutting: Hardness Results and Approximation Algorithms
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3492: A Unified Framework for Knowledge Intensive Gradient Boosting: Leveraging Human Experts for Noisy Sparse Domains

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3498: Swap Stability in Schelling Games on Graphs
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3499: What Makes A Good Story? Designing Composite Rewards for Visual Storytelling Junjie Hu (Carnegie Mellon University)*; Yu Cheng (Microsoft); Zhe Gan (Microsoft); Jingjing Liu (Microsoft); Jianfeng Gao (Microsoft Research); Graham Neubig (Carnegie Mellon University)

3508: Expressing Objects just like Words: Recurrent Visual Embedding for Image-Text Matching Tianlang Chen (University of Rochester)*; Jiebo Luo (U. Rochester)

3512: Improving Question Generation with Sentence-level Semantic Matching and Answer Position Inferring Xiyao Ma (University of Florida)*; Qile Zhu (University of Florida); Yanlin Zhou (University of Florida); Xiaolin Li (Tongdun Technology)

3515: AdaFilter: Adaptive Filter Fine-tuning for Deep Transfer Learning
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3516: Hard Examples for Common Variable Decision Heuristics Marc Vinyals (Technion)*

3522: Toward A Thousand Lights: Decentralized Deep Reinforcement Learning for Large-Scale Traffic Signal Control Chacha Chen (Pennsylvania State University)*; Hua Wei (Pennsylvania State University); Nan Xu (University of Southern California); Guanjie Zheng (Pennsylvania State University); Ming Yang (Shanghai Tianrang Intelligent Technology Co., Ltd); Yuanhao Xiong (Zhejiang University); Kai Xu (Shanghai Tianrang Intelligent Technology Co., Ltd); Zhenhui (Jessie) Li (Penn State University)

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3531: A Near-Optimal Change-Detection Based Algorithm for Piecewise-Stationary Combinatorial Semi-Bandits Huozhi Zhou (UIUC)*; Lingda Wang (University of Illinois at Urbana-Champaign); Lav Varshney (UIUC: ECE); Ee-peng Lim (Singapore Management University)

3537: Graph-Driven Generative Models for Heterogeneous Multi-Task Learning

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3544: The HSIC Bottleneck: Deep Learning without Back-Propagation

Wan-Duo Ma (Victoria University of Wellington)*; J.P. Lewis (Victoria University of Wellington); W. Bastiaan Kleijn (Victoria University of Wellington)

3550: Decoupled Attention Network for Text Recognition

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3573: Infinity Learning: Learning Markov Chains from Aggregate Steady-State Observations
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3574: Replicate, Walk, and Stop on Syntax: an Effective Neural Network Model for Aspect-Level Sentiment Classification

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3576: Repetitive Reprediction Deep Decipher for Semi-Supervised Learning Guo-Hua Wang (Nanjing University)*; Jianxin Wu (Nanjing University)

3579: Reliable and Efficient Anytime Skeleton Learning

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3588: Semi-supervised Multi-modal Learning with Balanced Spectral Decomposition

Peng Hu (Institute for Infocomm Research, A*STAR); Hongyuan Zhu (Astar)*; Xi Peng (College of Computer Science, Sichuan Univerisity); Jie Lin (Institute for Infocomm Research (I2R), Singapore)

3590: When Radiology Report Generation meets Knowledge Graph

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3605: CoCoX: Generating Conceptual and Counterfactual Explanations via Fault-Lines

Arjun Akula (University of California, Los Angeles (UCLA))*; Shuai Wang (University of Illinois at Chicago); Song-Chun Zhu (UCLA)

3612: Visual Domain Adaptation by Consensus-based Transfer to Intermediate Domain

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3623: Unsupervised Interlingual Semantic Representations from Sentence Embeddings for Zero-Shot Cross-Lingual Transfer

Channy Hong (Harvard University)*; Jaeyeon Lee (Superb AI); Jung Kwon Lee (Superb AI)

3625: Training-Time-Friendly Network for Real-Time Object Detection Zili Liu (ZJU)*; Tu Zheng (ZJU); Guodong Xu (Zhejiang University); Zheng Yang (FABU); Haifeng Liu (ZJU); Deng Cai (ZJU)

3632: IntroVNMT: An Introspective Model for Variational Neural Machine Translation
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3644: An Annotated Corpus of Reference Resolution for Interpreting Common Grounding Takuma Udagawa (University of Tokyo)*; Akiko Aizawa (National Institute of Informatics)

3656: P-SIF: Document Embeddings Using Partition Averaging Vivek Gupta (University of Utah)*; Ankit Saw (IIT KHARAGPUR); Pegah Nokhiz (University of Utah); Praneeth Netrapalli (Microsoft Research); Piyush Rai (IIT Kanpur); Partha Talukdar (Indian Institute of Science)

3657: Segment-then-Rank: Non-factoid Question Answering on Instructional Videos Kyungjae Lee (Yonsei University)*; Nan Duan (Microsoft Research); Lei Ji (Microsoft); Jason Li (Microsoft); Seungwon Hwang (Yonsei University, Korea)

3667: Learning Student Networks with Few Data Shumin Kong (University of Sydney)*; Tianyu Guo (Peking University); Shan You (Sensetime Research); Chang Xu (University of Sydney)

3674: Multi-channel Reverse Dictionary Model Lei Zhang (Tsinghua University); Fanchao Qi (Tsinghua University)*; Zhiyuan Liu (Tsinghua University); Yasheng Wang (NoahArk Lab, Huawei); Qun Liu (Huawei Noah's Ark Lab); Maosong Sun (Tsinghua University)

3684: Towards Fine-Grained Temporal Network Representation via Time-Reinforced Random Walk Zhining Liu (University of Electronic Science and Technology of China)*; Dawei Zhou (University of Illinois at Urbana-Champaign); Yada Zhu (IBM); Jinjie Gu (Ant Financial); Jingrui He (University of Illinois at Urbana-Champaign)

3685: Regularized Fine-grained Meta Face Anti-spoofing Rui Shao (Department of Computer Science, Hong Kong Baptist University)*; Xiangyuan Lan (Department of Computer Science, Hong Kong Baptist University); PongChi Yuen (Department of Computer Science, Hong Kong Baptist University)

3688: Fast Learning of Temporal Action Proposal via Dense Boundary Generator Chuming Lin (Tencent); Jian Li (Tencent Youtu)*; Yabiao Wang (Tencent); Ying Tai (Tencent YouTu); Donghao Luo (Tencent); Zhipeng Cui (Tencent); Chengjie Wang (Tencent); Jilin Li (Tencent); Feiyue Huang (Tencent); Rongrong Ji (Xiamen University, China)

3697: A Restricted Black-box Adversarial Framework Towards Attacking Graph Embedding Models

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3705: Temporally Grounding Language Queries in Videos by Contextual Boundary-aware Prediction Jingwen Wang (Tencent AI Lab)*; Lin Ma (Tencent AI Lab); Wenhao Jiang (Tencent AI Lab)

3709: Sentence Generation for Entity Description with Content-plan Attention
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3711: Recurrent Nested Model for Sequence Generation Wenhao Jiang (Tencent Al Lab)*; Lin Ma (Tencent Al Lab); Wei Lu (UESTC)

3715: Spatial Classification With Limited Observations Based On Physics-Aware Structural Constraint Arpan Man Sainju (University of Alabama); Wenchong He (University of Alabama); Zhe Jiang (University of Alabama)*; Da Yan (University of Alabama at Birmingham)

3716: Generate (non-software) Bugs to Fool Classifiers
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3721: Translation-based Matching Adversarial Network for Cross-lingual Natural Language Inference Kunxun Qi (Guangdong University of Foreign Studies)*; Jianfeng Du (Guangdong University of Foreign Studies)

3731: Learning to Incorporate Structure Knowledge for Image Inpainting
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3736: Fact-aware Sentence Split and Rephrase with Permutation Invariant Training Yinuo Guo (Peking University)*; Tao Ge (Microsoft); Furu Wei (Microsoft Research Asia)

3743: Adversarial Transformations for Semi-Supervised Learning Teppei Suzuki (Denso IT Laboratory)*; Ikuro Sato (Denso IT Laboratory)

3750: 3D Human Pose Estimation via Explicit Compositional Depth Maps Haiping Wu (McGill University)*; Bin Xiao (Bytedance Al Lab)

3751: Shared Generative Latent Representation Learning for Multi-view Clustering Ming Yin (School of automation, Guangdong University of Technology)*; Weitian Huang (School of automation, Guangdong University of Technology); Junbin Gao (University of Sydney, Australia)

3769: Modelling and Solving Online Optimisation Problems

Alexander Ek (Monash University)*; Maria Garcia de la Banda (Monash University); Andreas Schutt (CSIRO and The University of Melbourne); Peter Stuckey (Monash University); Guido Tack (Monash)

3770: Latent-Variable Non-Autoregressive Neural Machine Translation with Deterministic Inference Using a Delta Posterior

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3784: Active Learning with Query Generation for Cost-Effective Text Classification

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3786: Monte-Carlo Tree Search in Continuous Action Spaces with Value Gradients
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3787: RTN: Reparameterized Ternary Network

Yuhang Li (University of Electronic Science and Technology of China)*; Xin Dong (Harvard University); Sai Zhang (Harvard University); Haoli Bai (The Chinese University of Hong Kong); Yuanpeng Chen (University of Electronic Science and Technology of China); Wei Wang (NUS)

3796: Patch Proposal Network for Fast Semantic Segmentation of High-Resolution Images
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3800: Federated Latent Dirichlet Allocation: A Local Differential Privacy Based Framework Yansheng Wang (Beihang University); Yongxin Tong (Beihang University)*; Dingyuan Shi (Beihang University)

3821: Learning the Graphical Structure of Electronic Health Records with Graph Convolutional Transformer Edward Choi (Google)*; Zhen Xu (Google); Yujia Li (Deepmind); Michael Dusenberry (Google); Gerardo Flores (Google); Yuan Xue (Google); Andrew Dai (Google Brain)

3822: Span-based Neural Buffer: Towards Efficient and Effective Utilization of Long-Distance Context for Neural Sequence Models

Yangming Li (Ant Financial Services Group)*; Kaisheng Yao (Ant Financial Services Group); Libo Qin (Research Center for Social Computing and Information Retrieval, Harbin Institute of Technology); Shuang Peng (Ant Financial Services Group); Yijia Liu (Alibaba Group); Xiaolong Li (Ant Financial)

3823: Cross-Modality Attention Network for Temporal Inconsistent Audio-Visual Event Localization hanyu xuan (Nanjing University of Science and Technology)*; Zhenyu Zhang (Nanjing University of Science and Technology); Shuo Chen (Nanjing University of Science and Technology); Jian Yang (Nanjing University of Science and Technology); Yan Yan (Nanjing University of Science and Technology)

3824: GTNet: Generative Transfer Network for Zero-Shot Object Detection

Shizhen Zhao (Huazhong University of Science and Technology); Changxin Gao (Huazhong University of Science and Technology)*; Yuanjie Shao (Huazhong University of Science and Technology); Lerenhan Li (Huazhong University of Science and Technology); Changqian Yu (Huazhong University of Science and Technology); Zhong Ji (Tianjin University); Nong Sang (Huazhong University of Science and Technology)

3834: Automated Spectral Kernel Learning

Jian Li (Institute of Information Engineering, CAS); Yong Liu (Institute of Information Engineering, CAS)*; Weiping Wang (Institute of Information Engineering, CAS, China)

3843: A Simple and Efficient Tensor Calculus

Sören Laue (Friedrich Schiller University Jena / Data Assessment Solutions GmbH Hannover)*; Matthias Mitterreiter (Friedrich Schiller University Jena); Joachim Giesen (Friedrich Schiller University Jena)

3845: TEINet: Towards an Efficient Architecture for Video Recognition

Zhaoyang Liu (National Key Lab for Novel Software Technology, Nanjing University, China); Donghao Luo (Tencent); Yabiao Wang (Tencent); Limin Wang (Nanjing University)*; Ying Tai (Tencent YouTu); Chengjie Wang (Tencent); Jilin Li (Tencent); Feiyue Huang (Tencent); Tong Lu (Nanjing University)

3848: Heuristic Black-box Adversarial Attacks on Video Recognition Models

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3849: Time-inconsistent Planning: Simple Motivation Is Hard to Find Fedor Fomin (University of Bergen); Torstein Strømme (University of Bergen)*

3858: Conclusion-Supplement Answer Generation for Non-Factoid Questions Makoto Nakatsuji (NTT)*; Sohei Okui (NTT)

3861: Dynamic Graph Representation for Occlusion Handling in Biometrics

Min Ren (Center for Research on Intelligent Perception and Computing (CRIPAC), Institute of Automation, Chinese Academy of Sciences (CASIA), University of Chinese Academy of Sciences(UCAS))*; Yunlong Wang (Center for Research on Intelligent Perception and Computing (CRIPAC) National Laboratory of Pattern Recognition (NLPR) Institute of Automation, Chinese Academy of Sciences (CASIA)); Zhenan Sun (Chinese of Academy of Sciences); Tieniu Tan (NLPR, China)

3862: Adversarial Fence Patrolling: Non-Uniform Policies for Asymmetric Environments Yaniv Oshrat (Bar-Ilan University)*; Noa Agmon (Bar-Ilan University); Sarit Kraus (Bar-Ilan University)

3868: Improving Neural Relation Extraction with Positive and Unlabeled Learning Zhengqiu He (Soochow University); Wenliang Chen (Soochow University)*; Yuyi Wang (ETH Zurich); Wei Zhang (Alibaba Group); Guanchun Wang (Laiye Startup); Min Zhang (Soochow University)

3879: Zero-Shot Learning from Adversarial Feature Residual to Compact Visual Feature
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3880: Resilient Logic Programs: Answer Set Programs Challenged by Ontologies Sanja Lukumbuzya (Vienna University of Technology)*; Magdalena Ortiz (TU Wien, Austria); Mantas Simkus (TU Vienna)

3881: Few Shot Network Compression via Cross Distillation

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3888: Empirical Bounds on Linear Regions of Deep Rectifier Networks
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3896: SPAN: A Stochastic Projected Approximate Newton Method Xunpeng Huang (ByteDance. Inc); Xianfeng Liang (University of Science and Technology China); Zhengyang Liu (Bytedance); Lei Li (ByteDance Al Lab); Yue Yu (Tsinghua University)*; Yitan Li (ByteDance.Inc)

3901: Fine-Grained Machine Teaching with Attention Modeling
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3906: Deep Reinforcement Learning for Active Human Pose Estimation
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3910: Robust Tensor Decomposition via Orientation Invariant Tubal Nuclear Norms Andong Wang (NanJing Univ. of Sci.&Tech.)*; Chao Li (RIKEN); Zhong Jin (NanJing University of Science and Technology); Qibin Zhao (RIKEN AIP)

3914: Model Watermarking for Image Processing Networks

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3919: Learning Multi-level Dependencies for Robust Word Recognition
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3924: Tracklet Self-Supervised Learning for Unsupervised Person Re-Identification
Guile Wu (Queen Mary University of London)*; Xiatian Zhu (Samsung Al Centre, Cambridge); Shaogang Gong (Queen Mary University of London)

3925: Learning from Easy to Complex: Adaptive Multi-curricula Learning for Neural Dialogue Generation Hengyi Cai (Institute of Computing Technology, Chinese Academy of Sciences; University of Chinese Academy of Sciences)*; Hongshen Chen (JD.com); Cheng Zhang (Institute of Computing Technology, Chinese Academy of Sciences;); Yonghao Song (Institute of Computing Technology, Chinese Academy of Sciences); Xiaofang Zhao (Institute of Computing Technology, Chinese Academy of Sciences); Yangxi Li (National Computer network Emergency Response technical Team/Coordination Center of China); Dongsheng Duan (National Computer network Emergency Response technical Team/Coordination Center of China); Dawei Yin (JD.com)

3933: Efficient Neural Architecture Search via Proximal Iterations
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3934: FD-GAN: Generative Adversarial Networks with Fusion-discriminator for Single Image Dehazing Yu Dong (Shenzhen Institutes of Advanced Technology of the Chinese Academy of Science); Yihao Liu (University of Chinese Academy of Sciences); He Zhang (Rutgers); Yu Qiao (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences); Shifeng Chen (SIAT)*

3935: Multi-instance Multi-label Action Recognition and Localization Based on Spatio-Temporal Pre-trimming for Untrimmed Videos

Xiao-Yu Zhang (Institute of Information Engineering, Chinese Academy of Sciences)*; Haichao Shi (Institute of Information Engineering, Chinese Academy of Sciences); Changsheng Li (University of Electronic Science and Technology of China); Peng Li (China University of Petroleum (East China))

3936: Incorporating Expert-based Investment Opinion Signals in Stock Prediction: A Deep Learning Framework Heyuan Wang (Key Lab of High Confidence Software Technologies(MOE), School of EECS, Peking University)*; Tengjiao Wang (Key Lab of High Confidence Software Technologies(MOE), School of EECS, Peking University); Yi Li (Key Lab of High Confidence Software Technologies(MOE), School of EECS, Peking University)

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3951: An Operational Semantics for True Concurrency in BDI Agent Systems Lavindra de Silva (University of Cambridge)*

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4519: Tweedie-Hawkes Processes: Interpreting the Phenomena of Outbreaks
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4545: RIS-GAN: Explore Residual and Illumination with Generative Adversarial Networks for Shadow Removal Ling Zhang (Wuhan University of Science and Technology); Chengjiang Long (Kitware Inc)*; Xiaolong Zhang (Wuhan University of Science and Technology); Chunxia Xiao (Wuhan University)

4548: Auto-GAN: Self-Supervised Collaborative Learning for Medical Image Synthesis
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4566: Feature Deformation Meta-Networks in Image Captioning of Novel Objects
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4588: Co-GCN for Multi-View Semi-Supervised Learning Shu Li (Nanjing University)*; Wen-Tao Li (Nanjing University); Wei Wang (Nanjing University)

4599: Object-Oriented Dynamics Learning through Multi-Level Abstraction Guangxiang Zhu (Tsinghua university)*; Jianhao Wang (Tsinghua University); Zhizhou Ren (Tsinghua University); Zichuan Lin (Tsinghua University); Chongjie Zhang (Tsinghua University)

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4613: Explicit Sentence Compression for Neural Machine Translation

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4651: Kinematic-Structure-Preserved Representation for Unsupervised 3D Human Pose Estimation Jogendra Nath Kundu (Indian Institute of Science)*; Siddharth Seth (Indian Institute of Science); Rahul M V (Carnegie Mellon University); Mugalodi Rakesh (Indian Institute of Science); Venkatesh Babu RADHAKRISHNAN (Indian Institute of Science); Anirban Chakraborty (Indian Institute of Science)

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4678: Revision in Continuous Space: Unsupervised Text Style Transfer without Adversarial Learning Dayiheng Liu (Sichuan University)*; Jie Fu (Mila, Polytechnique Montreal); Yidan Zhang (Sichuan University); Chris Pal (MILA, Polytechnique Montréal, Element Al); Jiancheng Lv (Sichuan University)

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4688: Question-driven Purchasing Propensity Analysis for Recommendation Long Chen (Xi'an University of Posts & Telecommunications)*; Qibin Xu (Zhejiang University); Ziyu Guan (Xidian University); Qiong Zhang (Alibaba Group); Huan Sun (Ohio State University); Guangyue Lu (Xian University of Posts and Telecommunications); Deng Cai (ZJU)

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4723: MuMod: A Micro-unit Connection Approach for Hybrid-order Community Detection Ling Huang (Sun Yat-sen University); Hongyang Chao (Sun Yat-sen University)*; Guangqiang Xie (Guangdong University of Technology)

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4799: SGAP-Net: Semantic-Guided Attentive Prototypes Network for Few-Shot Human-Object Interaction Recognition

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4804: Graph Convolutional Networks with Markov Random Field Reasoning for Social Spammer Detection Yongji Wu (University of Science and Technology of China)*; Defu Lian (University of Science and Technology of China); Yiheng Xu (Harbin Institute of Technology); Le Wu (Hefei University of Technology); Enhong Chen (University of Science and Technology of China)

4814: Deep Reinforcement Learning for General Game Playing

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4824: FPETS: Fully Parallel End-to-End Text-to-Speech System

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4837: Fatigue-aware Bandits for Dependent Click Models

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4997: A Constraint-Based Approach to Learning and Explanation

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