



AAAI-20, New York

**AAAI-20 Poster / Demo Paper Guide**  
**Americas Hall I / II**  
**New York Hilton Midtown Hotel**

Sunday, February 9, 7:30 – 9:30 PM  
Monday, February 10, 7:20 – 9:20 PM  
Tuesday, February 11, 6:30 – 8:30 PM



## WELCOME TO THE AAAI-20 POSTER AND DEMO SESSIONS!

Each AAAI 20 Poster/Demo Session will include posters by authors who give oral or spotlight presentations during the conference. Poster presentations are scheduled on the same evening as the oral presentation or spotlight presentation, except for Wednesday oral presentations, which will be presented in poster format on Tuesday evening. (Note that some oral paper presenters elected not to participate in the poster portion of the program.) Papers will be organized by primary subject areas in the poster/demo sessions and signs will be posted to designate clusters of subject areas. Posters will be arranged within subject area by paper ID numbers. Sunday evening posters will also include International Science Fair AAAI award-winning projects, Doctoral Consortium papers, Undergraduate Consortium papers, and EAAI-20 posters. A total of 25 technical demos and 137 student abstract posters will be divided among the three evening sessions. Twenty student abstract posters, selected as finalists in the 3-Minute Presentation Award Contest, will be presented on Monday evening, and are designated by an \* in the schedule. A map will be posted in Guidebook and the poster hall to assist authors and attendees in locating presentations.

*The number preceding the paper code and title denotes the corresponding board position in the layout for that day. (Note that posters have been grouped with their proceedings content area, which may be different than their session name.)*

### Sunday, February 9

7:30 – 9:30 PM

#### AI and the Web (AIW)

- 1-AIW481:** A Spherical Convolution Approach for Learning Long Term Viewport Prediction in 360 Immersive Video  
Chenglei Wu, Rui-Xiao Zhang, Zhi Wang, Lifeng Sun
- 2-AIW2119:** Where to Go Next: Modeling Long- and Short-Term User Preferences for Point-of-Interest Recommendation  
Ke Sun, Tiejun Qian, Tong Chen, Yile Liang, Quoc Viet Hung Nguyen, Hongzhi Yin
- 3- AIW2377:** Interactive Rare-Category-of-Interest Mining from Large Datasets  
Zhenguang Liu, Sihao Hu, Yifang Yin, Jianhai Chen, Kevin Chiew, Luming Zhang, Zetian Wu
- 4- AIW3195:** Learned Video Compression via Joint Spatial-Temporal Correlation Exploration  
Haojie Liu, Han Shen, Lichao Huang, Ming Lu, Tong Chen, Zhan Ma
- 5- AIW3224:** Understanding and Improving Proximity Graph Based Maximum Inner Product Search  
Jie Liu, Xiao Yan, Xinyan Dai, Zhirong Li, James Cheng, Ming-Chang Yang
- 6- AIW3229:** Norm-Explicit Quantization: Improving Vector Quantization for Maximum Inner Product Search  
Xinyan Dai, Xiao Yan, Kelvin K. W. Ng, Jie Liu, James Cheng
- 7- AIW3241:** An Attentional Recurrent Neural Network for Personalized Next Location Recommendation  
Qing Guo, Zhu Sun, Jie Zhang, Yin-Leng Theng
- 8- AIW3528:** Leveraging Title-Abstract Attentive Semantics for Paper Recommendation  
Guibing Guo, Bowei Chen, Xiaoyan Zhang, Zhirong Liu, Zhenhua Dong, Xiuqiang He
- 9- AIW3588:** Semi-Supervised Multi-Modal Learning with Balanced Spectral Decomposition  
Peng Hu, Hongyuan Zhu, Xi Peng, Jie Lin
- 10- AIW5099:** Deep Match to Rank Model for Personalized Click-Through Rate Prediction  
Ze Lyu, Yu Dong, Chengfu Huo, Weijun Ren

- 11- AIW5535:** A Recurrent Model for Collective Entity Linking with Adaptive Features  
Xiaoling Zhou, Yukai Miao, Wei Wang, Jianbin Qin

#### Applications (APP)

- 12- APP66:** Privacy-Preserving Gradient Boosting Decision Trees  
Qinbin Li, Zhaomin Wu, Zeyi Wen, Bingsheng He
- 13- APP1465:** Pairwise Learning with Differential Privacy Guarantees  
Mengdi Huai, Di Wang, Chenglin Miao, Jinhui Xu, Aidong Zhang
- 14- APP2023:** Object-Guided Instance Segmentation for Biological Images  
Jingru Yi, Hui Tang, Pengxiang Wu, Bo Liu, Daniel J. Hoepfner, Dimitris N. Metaxas, Liyan Han, Wei Fan
- 15- APP2261:** Towards Cross-Modality Medical Image Segmentation with Online Mutual Knowledge Distillation  
Kang Li, Lequan Yu, Shujun Wang, Pheng-Ann Heng
- 16- APP3537:** Graph-Driven Generative Models for Heterogeneous Multi-Task Learning  
Wenlin Wang, Hongteng Xu, Zhe Gan, Bai Li, Guoyin Wang, Liqun Chen, Qian Yang, Wenqi Wang, Lawrence Carin
- 17- APP3936:** Incorporating Expert-Based Investment Opinion Signals in Stock Prediction: A Deep Learning Framework  
Heyuan Wang, Tengjiao Wang, Yi Li
- 18-APP4483:** Reinforcement-Learning Based Portfolio Management with Augmented Asset Movement Prediction States  
Yunan Ye, Hengzhi Pei, Boxin Wang, Pin-Yu Chen, Yada Zhu, Jun Xiao, Bo Li
- 19- APP5484:** MRI Reconstruction with Interpretable Pixel-Wise Operations Using Reinforcement Learning  
Wentian Li, Xidong Feng, Haotian An, Xiang Yao Ng, Yu-Jin Zhang
- 20- APP5592:** CASTER: Predicting Drug Interactions with Chemical Substructure Representation  
Kexin Huang, Cao Xiao, Trong Nghia Hoang, Lucas M. Glass, Jimeng Sun
- 21- APP5915:** A Graph Auto-Encoder for Haplotype Assembly and Viral Quasispecies Reconstruction  
Ziqi Ke, Haris Vikalo

**22- APP6057: Differentially Private and Fair Classification via Calibrated Functional Mechanism**

Jiahao Ding, Xinyue Zhang, Xiaohuan Li, Junyi Wang, Rong Yu, Miao Pan

**23- APP6125: Doctor2Vec: Dynamic Doctor Representation Learning for Clinical Trial Recruitment**

Siddharth Biswal, Cao Xiao, Lucas M. Glass, Elizabeth Milkovits, Jimeng Sun

**24- APP6697: Generating Realistic Stock Market Order Streams**

Junyi Li, Xintong Wang, Yaoyang Lin, Arunesh Sinha, Michael P. Wellman

**25- APP7101: Iteratively Questioning and Answering for Interpretable Legal Judgment Prediction**

Haoxi Zhong, Yuzhong Wang, Cunchao Tu, Tianyang Zhang, Zhiyuan Liu, Maosong Sun

**26- APP7706: Can Embeddings Adequately Represent Medical Terminology? New Large-Scale Medical Term Similarity Datasets Have the Answer!**

Claudia Schulz, Damir Juric

**27- APP7932: SynSig2Vec: Learning Representations from Synthetic Dynamic Signatures for Real-World Verification**

Songxuan Lai, Lianwen Jin, Luoju Lin, Yecheng Zhu, Huiyun Mao

**28- APP8057: GAN-Based Unpaired Chinese Character Image Translation via Skeleton Transformation and Stroke Rendering**

Yiming Gao, Jiangqin Wu

**29- APP8224: Chemically Interpretable Graph Interaction Network for Prediction of Pharmacokinetic Properties of Drug-Like Molecules**

Yashaswi Pathak, Siddhartha Laghuvarapu, Sarvesh Mehta, U Deva Priyakumar

**30- APP8415: Shoreline: Data-Driven Threshold Estimation of the Online Reserves of Cryptocurrency Trading Platforms**

Xitong Zhang, He Zhu, Jiayu Zhou

**31- APP8599: CORE: Automatic Molecule Optimization Using Copy & Refine Strategy**

Tianfan Fu, Cao Xiao, Jimeng Sun

**32- APP9491: Differentially Private Learning with Small Public Data**

Jun Wang, Zhi-Hua Zhou

**33- APP9733: DeepVar: An End-to-End Deep Learning Approach for Genomic Variant Recognition in Biomedical Literature**

Chaoran Cheng, Fei Tan, Zhi Wei

**34- APP10477: MaskGEC: Improving Neural Grammatical Error Correction via Dynamic Masking**

Zewei Zhao, Houfeng Wang

## **Constraint Satisfaction and Optimization (CSO)**

**35- CSO1126: Do Subsampled Newton Methods Work for High-Dimensional Data?**

Xiang Li, Shusen Wang, Zhihua Zhang

**36- CSO1344: Guiding CDCL SAT Search via Random Exploration Amid Conflict Depression**

Md Solimul Chowdhury, Martin Müller, Jia-Huai You

**37- CSO1758: Learning to Optimize Computational Resources: Frugal Training with Generalization Guarantees**

Maria-Florina Balcan, Tuomas Sandholm, Ellen Vitercik

**38- CSO2787: Accelerating Column Generation via Flexible Dual Optimal Inequalities with Application to Entity Resolution**

Vishnu Suresh Lokhande, Shaofei Wang, Maneesh Singh, Julian Yarkony

**39- CSO2997: Solving Set Cover and Dominating Set via Maximum Satisfiability**

Zhendong Lei, Shaowei Cai

**40- CSO3769: Modelling and Solving Online Optimisation Problems**

Alexander Ek, Maria Garcia de la Banda, Andreas Schutt, Peter J. Stuckey, Guido Tack

**41- CSO4763: Trading Convergence Rate with Computational Budget in High Dimensional Bayesian Optimization**

Hung Tran-The, Sunil Gupta, Santu Rana, Svetha Venkatesh

**42- CSO6013: FourierSAT: A Fourier Expansion-Based Algebraic Framework for Solving Hybrid Boolean Constraints**

Anastasios Kyrillidis, Anshumali Shrivastava, Moshe Y. Vardi, Zhiwei Zhang

**43- CSO6051: Deep Neural Network Approximated Dynamic Programming for Combinatorial Optimization**

Shenghe Xu, Shivendra S. Panwar, Murali Kodialam, T.V. Lakshman

**44- CSO6056: A Cardinal Improvement to Pseudo-Boolean Solving**

Jan Elffers, Jakob Nordström

**45- CSO6164: Optimization of Chance-Constrained Submodular Functions**

Benjamin Doerr, Carola Doerr, Aneta Neumann, Frank Neumann, Andrew M. Sutton

**46- CSO8517: Probabilistic Inference for Predicate Constraint Satisfaction**

Yuki Satake, Hiroshi Unno, Hinata Yanagi

**47- CSO9674: Predicting Propositional Satisfiability via End-to-End Learning**

Chris Cameron, Rex Chen, Jason Hartford, Kevin Leyton-Brown

## **Computational Sustainability (CSUS)**

**48- CSUS4719: Modeling Electrical Motor Dynamics using Encoder-Decoder with Recurrent Skip Connection**

Sagar Verma, Nicolas Henwood, Marc Castella, Francois Malrait, Jean-Christophe Pesquet

## **Game Theory and Economic Paradigms (GTEP)**

**49- GTEP1140: Iterative Delegations in Liquid Democracy with Restricted Preferences**

Bruno Escoffier, Hugo Gilbert, Adèle Pass-Lanneau

*AAAI-20 Outstanding Student Paper*

**50- GTEP1179: Fair Division of Mixed Divisible and Indivisible Goods**

Xiaohui Bei, Zihao Li, Jinyan Liu, Shengxin Liu, Xinhang Lu

**51- GTEP2006: Price of Fairness in Budget Division and Probabilistic Social Choice**

Marcin Michorzewski, Dominik Peters, Piotr Skowron

**52- GTEP2149: Double-Oracle Sampling Method for Stackelberg Equilibrium Approximation in General-Sum Extensive-Form Games**

Jan Karwowski, Jacek Mańdziuk

**53- GTEP2762: Lifting Preferences over Alternatives to Preferences over Sets of Alternatives: the Complexity of Recognizing Desirable Families of Sets**  
Jan Maly

**54- GTEP2871: Structure Learning for Approximate Solution of Many-Player Games**  
Zun Li, Michael P. Wellman

**55- GTEP3096: Computing Team-Maxmin Equilibria in Zero-Sum Multiplayer Extensive-Form Games**  
Youzhi Zhang, Bo An

**56- GTEP3118: Model and Reinforcement Learning for Markov Games with Risk Preferences**  
Wenjie Huang, Pham Viet Hai, William B. Haskell

**57- GTEP3329: Coarse Correlation in Extensive-Form Games**  
Gabriele Farina, Tommaso Bianchi, Tuomas Sandholm

**58- GTEP3409: Refining Tournament Solutions via Margin of Victory**  
Markus Brill, Ulrike Schmidt-Kraepelin, Warut Suksompong

**59- GTEP3445: Persuading Voters: It's Easy to Whisper, It's Hard to Speak Loud**  
Matteo Castiglioni, Andrea Celli, Nicola Gatti

**60- GTEP3450: Private Bayesian Persuasion with Sequential Games**  
Andrea Celli, Stefano Coniglio, Nicola Gatti

**61- GTEP3488: Contiguous Cake Cutting: Hardness Results and Approximation Algorithms**  
Paul W. Goldberg, Alexandros Hollender, Warut Suksompong

**62- GTEP4005: Algorithms for Manipulating Sequential Allocation**  
Mingyu Xiao, Jiaying Ling

**63- GTEP5545: Parameterized Algorithms for Finding a Collective Set of Items**  
Robert Bredereck, Piotr Faliszewski, Andrzej Kaczmarczyk, Dušan Knop, Rolf Niedermeier

**64- GTEP7073: Practical Frank – Wolfe Method with Decision Diagrams for Computing Wardrop Equilibrium of Combinatorial Congestion Games**  
Kengo Nakamura, Shinsaku Sakae, Norihito Yasuda

**65- GTEP7574: Distance-Based Equilibria in Normal-Form Games**  
Erman Acar, Reshef Meir

**66- GTEP7933: Favorite-Candidate Voting for Eliminating the Least Popular Candidate in a Metric Space**  
Xujin Chen, Minming Li, Chenhao Wang

**67- GTEP8279: Manipulating Districts to Win Elections: Fine-Grained Complexity**  
Eduard Eiben, Fedor V. Fomin, Fahad Paholan, Kirill Simonov

**68- GTEP8806: Analysis of One-to-One Matching Mechanisms via SAT Solving: Impossibilities for Universal Axioms**  
Ulle Endriss

## Human-AI Collaboration (HAC)

**69- HAC5518: Explainable Reinforcement Learning Through a Causal Lens**  
Prashan Madumal, Tim Miller, Liz Sonenberg, Frank Vetere

**70- HAC5768: Learning to Interactively Learn and Assist**  
Mark Woodward, Chelsea Finn, Karol Hausman

**71- HAC6001: A General Approach to Fairness with Optimal Transport**  
Silvia Chiappa, Ray Jiang, Tom Stepleton, Aldo Pacchiano, Heinrich Jiang, John Aslanides

**72- HAC6857: Just Ask: An Interactive Learning Framework for Vision and Language Navigation**  
Ta-Chung Chi, Mihail Eric, Seokhwan Kim, Minmin Shen, Dilek Hakkani-Tur

**73- HAC7632: Actionable Ethics through Neural Learning**  
Daniele Rossini, Danilo Croce, Sara Mancini, Massimo Pellegrino, Roberto Basili

**74- HAC9448: What Is It You Really Want of Me? Generalized Reward Learning with Biased Beliefs about Domain Dynamics**  
Ze Gong, Yu Zhang

## Humans and AI (HAI)

**75- HAI715: SaSAC: A Video Saliency Prediction Model with Shuffled Attentions and Correlation-Based ConvLSTM**  
Xinyi Wu, Zhenyao Wu, Jinglin Zhang, Lili Ju, Song Wang

**76- HAI1056: Conditional Generative Neural Decoding with Structured CNN Feature Prediction**  
Changde Du, Changying Du, Lijie Huang, Huiguang He

**77- HAI1698: Towards Socially Responsible AI: Cognitive Bias-Aware Multi-Objective Learning**  
Procheta Sen, Debasis Ganguly

**78- HAI2299: Towards Awareness of Human Relational Strategies in Virtual Agents**  
Ian Beaver, Cynthia Freeman, Abdullah Mueen

**79- HAI4193: CG-GAN: An Interactive Evolutionary GAN-Based Approach for Facial Composite Generation**  
Nicola Zaltron, Luisa Zurlo, Sebastian Risi

**80- HAI4471: Asymptotically Unambitious Artificial General Intelligence**  
Michael K. Cohen, Badri Vellambi, Marcus Hutter

**81- HAI6072: FLNet: Landmark Driven Fetching and Learning Network for Faithful Talking Facial Animation Synthesis**  
Kuangxiao Gu, Yuqian Zhou, Thomas Huang

## Heuristic Search and Optimization (HSO)

**82- HSO208: Reduction and Local Search for Weighted Graph Coloring Problem**  
Yiyuan Wang, Shaowei Cai, Shiwei Pan, Ximing Li, Minghao Yin

**83- HSO1164: Local Search with Dynamic-Threshold Configuration Checking and Incremental Neighborhood Updating for Maximum K-Plex Problem**  
Peilin Chen, Hai Wan, Shaowei Cai, Jia Li, Haicheng Chen

**84- HSO1773: Envelope-Based Approaches to Real-Time Heuristic Search**  
Kevin C. Gall, Bence Csorna, Wheeler Ruml

*AAAI-20 Outstanding Paper Honorable Mention*

**85-** HSO2565: A Unifying View on Individual Bounds and Heuristic Inaccuracies in Bidirectional Search  
Vidal Alcázar, Pat Riddle, Michael Barley

**86-** HSO2742: Beliefs We Can Believe In: Replacing Assumptions with Data in Real-Time Search  
Maximilian Fickert, Tianyi Gu, Leonhard Staut, Wheeler Ruml, Jörg Hoffmann, Marek Petrik

**87-** HSO2813: Learning to Optimize Variational Quantum Circuits to Solve Combinatorial Problems  
Sami Khairy, Ruslan Shaydulin, Lukasz Cincio, Yuri Alexeev, Prasanna Balaprakash

**88-** HSO3364: On Performance Estimation in Automatic Algorithm Configuration  
Shengcai Liu, Ke Tang, Yunwen Lei, Xin Yao

**89-** HSO5811: Cakewalk Sampling  
Uri Patish, Shimon Ullman

**90-** HSO9699: Enumerating Maximal  $k$ -Plexes with Worst-Case Time Guarantee  
Yi Zhou, Jingwei Xu, Zhenyu Guo, Mingyu Xiao, Yan Jin

## Knowledge Representation and Reasoning (KRR)

**91-** KRR270: A Practical Approach to Forgetting in Description Logics with Nominals  
Yizheng Zhao, Renate A. Schmidt, Yuejie Wang, Xuanming Zhang, Hao Feng

**92-** KRR280: Ranking-Based Semantics for Sets of Attacking Arguments  
Bruno Yun, Srdjan Vesic, Madalina Croitoru

**93-** KRR1148: Query Answering with Guarded Existential Rules under Stable Model Semantics  
Hai Wan, Guohui Xiao, Chenglin Wang, Xianqiao Liu, Junhong Chen, Zhe Wang

**94-** KRR3174: LTLf Synthesis with Fairness and Stability Assumptions  
Shufang Zhu, Giuseppe De Giacomo, Geguang Pu, Moshe Y. Vardi

**95-** KRR4020: ParamE: Regarding Neural Network Parameters as Relation Embeddings for Knowledge Graph Completion  
Feihu Che, Dawei Zhang, Jianhua Tao, Mingyue Niu, Bocheng Zhao

**96-** KRR4791: Least General Generalizations in Description Logic: Verification and Existence  
Jean Christoph Jung, Carsten Lutz, Frank Wolter

**97-** KRR5480: Complexity and Expressive Power of Disjunction and Negation in Limit Datalog  
Mark Kaminski, Bernardo Cuenca Grau, Egor V. Kostylev, Ian Horrocks

**98-** KRR5505: Learning and Reasoning for Robot Sequential Decision Making under Uncertainty  
Saeid Amiri, Mohammad Shokrolah Shirazi, Shiqi Zhang

**99-** KRR5571: ElGolog: A High-Level Programming Language with Memory of the Execution History  
Giuseppe De Giacomo, Yves Lespérance, Eugenia Ternovska

**100-** KRR5594: K-BERT: Enabling Language Representation with Knowledge Graph  
Weijie Liu, Peng Zhou, Zhe Zhao, Zhiruo Wang, Qi Ju, Haotang Deng, Ping Wang

**101-** KRR6048: Deciding the Loosely Guarded Fragment and Querying Its Horn Fragment Using Resolution  
Sen Zheng, Renate A. Schmidt

**102-** KRR8202: Automatic Verification of Liveness Properties in the Situation Calculus  
Jian Li, Yongmei Liu

**103-** KRR9502: Commonsense Knowledge Base Completion with Structural and Semantic Context  
Chaitanya Malaviya, Chandra Bhagavatula, Antoine Bosselut, Yejin Choi

## Multiagent Systems (MAS)

**104-** MAS551: Multi-Objective Multi-Agent Planning for Jointly Discovering and Tracking Mobile Objects  
Hoa Van Nguyen, Hamid Reza Tofighi, Ba-Ngu Vo, Damith C. Ranasinghe

**105-** MAS5539: Model Checking Temporal Epistemic Logic under Bounded Recall  
Francesco Belardinelli, Alessio Lomuscio, Emily Yu

**106-** MAS9802: Solving Sum-of-Costs Multi-Agent Pathfinding with Answer-Set Programming  
Rodrigo N. Gómez, Carlos Hernández, Jorge A. Baier

## Machine Learning (ML)

**107-** ML23: BOWL: Bayesian Optimization for Weight Learning in Probabilistic Soft Logic  
Sriram Srinivasan, Golnoosh Farnadi, Lise Getoor

**108-** ML175: Characterizing Membership Privacy in Stochastic Gradient Langevin Dynamics  
Bingzhe Wu, Chaochao Chen, Shiwan Zhao, Cen Chen, Yuan Yao, Guangyu Sun, Li Wang, Xiaolu Zhang, Jun Zhou

**109-** ML199: Chained Representation Cycling: Learning to Estimate 3D Human Pose and Shape by Cycling Between Representations  
Nadine Rüegg, Christoph Lassner, Michael Black, Konrad Schindler

**110-** ML504: Coupled-View Deep Classifier Learning from Multiple Noisy Annotators  
Shikun Li, Shiming Ge, Yingying Hua, Chunhui Zhang, Hao Wen, Tengfei Liu, Weiqiang Wang

**111-** ML904: Layerwise Sparse Coding for Pruned Deep Neural Networks with Extreme Compression Ratio  
Xiao Liu, Wenbin Li, Jing Huo, Lili Yao, Yang Gao

**112-** ML947: Estimating Early Fundraising Performance of Innovations via Graph-Based Market Environment Model  
Likang Wu, Zhi Li, Hongke Zhao, Zhen Pan, Qi Liu, Enhong Chen

**113-** ML1043: End-to-End Unpaired Image Denoising with Conditional Adversarial Networks  
Zhiwei Hong, Xiaochen Fan, Tao Jiang, Jianxing Feng

**114-** ML1258: Neural Cognitive Diagnosis for Intelligent Education Systems  
Fei Wang, Qi Liu, Enhong Chen, Zhenya Huang, Yuying Chen, Yu Yin, Zai Huang, Shijin Wang

**115-** ML1309: Revisiting Online Quantum State Learning  
Feidiao Yang, Jiaqing Jiang, Jialin Zhang, Xiaoming Sun

- 116-** ML1325: Improved Visual-Semantic Alignment for Zero-Shot Object Detection  
Shafin Rahman, Salman Khan, Nick Barnes
- 117-** ML1341: An Annotation Sparsification Strategy for 3D Medical Image Segmentation via Representative Selection and Self-Training  
Hao Zheng, Yizhe Zhang, Lin Yang, Chaoli Wang, Danny Z. Chen
- 118-** ML1545: Learning Saliency-Free Model with Generic Features for Weakly-supervised Semantic Segmentation  
Wenfeng Luo, Meng Yang
- 119-** ML1650: Adaptive Factorization Network: Learning Adaptive-Order Feature Interactions  
Weiyu Cheng, Yanyan Shen, Linpeng Huang
- 120-** ML1687: Stochastic Online Learning with Probabilistic Graph Feedback  
Shuai Li, Wei Chen, Zheng Wen, Kwong-Sak Leung
- 121-** ML1768: Privacy-Preserving Gaussian Process Regression – A Modular Approach to the Application of Homomorphic Encryption  
Peter Fenner, Edward O. Pyzer-Knapp
- 122-** ML1830: Systematically Exploring Associations among Multivariate Data  
Lifeng Zhang
- 123-** ML1964: Training Decision Trees as Replacement for Convolution Layers  
Wolfgang Fuhl, Gjergji Kasneci, Wolfgang Rosenstiel, Enkeljda Kasneci
- 124-** ML2005: Less Is Better: Unweighted Data Subsampling via Influence Function  
Zifeng Wang, Hong Zhu, Zhenhua Dong, Xiuqiang He, Shao-Lun Huang
- 125-** ML2016: Projective Quadratic Regression for Online Learning  
Wenye Ma
- 126-** ML2158: Towards Interpretation of Pairwise Learning  
Mengdi Huai, Di Wang, Chenglin Miao, Aidong Zhang
- 127-** ML2247: Adaptive Quantitative Trading: an Imitative Deep Reinforcement Learning Approach  
Yang Liu, Qi Liu, Hongke Zhao, Zhen Pan, Chuanren Liu
- 128-** ML2307: Learning General Latent-Variable Graphical Models with Predictive Belief Propagation  
Borui Wang, Geoffrey Gordon
- 129-** ML2379: OOGAN: Disentangling GAN with One-Hot Sampling and Orthogonal Regularization  
Bingchen Liu, Yizhe Zhu, Zuohui Fu, Gerard de Melo, Ahmed Elgammal
- 130-** ML2437: Cross-Modal Subspace Clustering via Deep Canonical Correlation Analysis  
Quanxue Gao, Huanhuan Lian, Qianqian Wang, Gan Sun
- 131-** ML2494: Fractional Skipping: Toward Finer-Grained Dynamic CNN Inference  
Jianghao Shen, Yue Wang, Pengfei Xu, Yonggan Fu, Zhangyang Wang, Yingyan Lin
- 132-** ML2627: Instance Enhancement Batch Normalization: An Adaptive Regulator of Batch Noise  
Senwei Liang, Zhongzhan Huang, Mingfu Liang, Haizhao Yang
- 133-** ML2690: Segmenting Medical MRI via Recurrent Decoding Cell  
Ying Wen, Kai Xie, Lianghua He
- 134-** ML2914: Plug-In, Trainable Gate for Streamlining Arbitrary Neural Networks  
Jaedeok Kim, Chiyoun Park, Hyun-Joo Jung, Yoonsuck Choe
- 135-** ML2932: Towards Certificated Model Robustness Against Weight Perturbations  
Tsui-Wei Weng, Pu Zhao, Sijia Liu, Pin-Yu Chen, Xue Lin, Luca Daniel
- 136-** ML3084: Exact and Efficient Inference for Collective Flow Diffusion Model via Minimum Convex Cost Flow Algorithm  
Yasunori Akagi, Takuya Nishimura, Yusuke Tanaka, Takeshi Kurashima, Hiroyuki Toda
- 137-** ML3167: Online Metric Learning for Multi-Label Classification  
Xiuwen Gong, Dong Yuan, Wei Bao
- 138-** ML3278: Aggregated Learning: A Vector-Quantization Approach to Learning Neural Network Classifiers  
Masoumeh Soflaei, Hongyu Guo, Ali Al-Bashabsheh, Yongyi Mao, Richong Zhang
- 139-** ML3426: Memory Augmented Graph Neural Networks for Sequential Recommendation  
Chen Ma, Liheng Ma, Yingxue Zhang, Jianing Sun, Xue Liu, Mark Coates
- 140-** ML3430: Improved PAC-Bayesian Bounds for Linear Regression  
Vera Shalaeva, Alireza Fakhrizadeh Esfahani, Pascal Germain, Mihaly Petreczky
- 141-** ML3435: Interpretable and Differentially Private Predictions  
Frederik Harder, Matthias Bauer, Mijung Park
- 142-** ML3492: A Unified Framework for Knowledge Intensive Gradient Boosting: Leveraging Human Experts for Noisy Sparse Domains  
Harsha Kokel, Phillip Odom, Shuo Yang, Sriraam Natarajan
- 143-** ML3543: Pairwise Fairness for Ranking and Regression  
Harikrishna Narasimhan, Andrew Cotter, Maya Gupta, Serena Wang
- 144-** ML3544: The HSIC Bottleneck: Deep Learning without Back-Propagation  
Wan-Duo Kurt Ma, J.P. Lewis, W. Bastiaan Kleijn
- 145-** ML3576: Repetitive Reprediction Deep Decipher for Semi-Supervised Learning  
Guo-Hua Wang, Jianxin Wu
- 146-** ML3784: Active Learning with Query Generation for Cost-Effective Text Classification  
Yi-Fan Yan, Sheng-Jun Huang, Shaoyi Chen, Meng Liao, Jin Xu
- 147-** ML3834: Automated Spectral Kernel Learning  
Jian Li, Yong Liu, Weiping Wang
- 148-** ML3888: Empirical Bounds on Linear Regions of Deep Rectifier Networks  
Thiago Serra, Srikumar Ramalingam
- 149-** ML3914: Model Watermarking for Image Processing Networks  
Jie Zhang, Dongdong Chen, Jing Liao, Han Fang, Weiming Zhang, Wenbo Zhou, Hao Cui, Nenghai Yu

- 150-** ML4292: Ensembles of Locally Independent Prediction Models  
Andrew Slavin Ross, Weiwei Pan, Leo Anthony Celi, Finale Doshi-Velez
- 151-** ML4296: Learning Counterfactual Representations for Estimating Individual Dose-Response Curves  
Patrick Schwab, Lorenz Linhardt, Stefan Bauer, Joachim M. Buhmann, Walter Karlen
- 152-** ML4305: Event-Driven Continuous Time Bayesian Networks  
Debarun Bhattacharjya, Karthikeyan Shanmugam, Tian Gao, Nicholas Mattei, Kush R. Varshney, Dharmashankar Subramanian
- 153-** ML4327: Asking the Right Questions to the Right Users: Active Learning with Imperfect Oracles  
Shayok Chakraborty
- 154-** ML4332: Gromov-Wasserstein Factorization Models for Graph Clustering  
Hongteng Xu
- 155-** ML4346: Deep Message Passing on Sets  
Yifeng Shi, Junier Oliva, Marc Niethammer
- 156-** ML4372: Active Learning in the Geometric Block Model  
Eli Chien, Antonia Maria Tulino, Jaime Llorca
- 157-** ML4374: Self-Supervised Learning for Generalizable Out-of-Distribution Detection  
Sina Mohseni, Mandar Pitale, JBS Yadawa, Zhangyang Wang
- 158-** ML4398: Adaptive Double-Exploration Tradeoff for Outlier Detection  
Xiaojin Zhang, Honglei Zhuang, Shengyu Zhang, Yuan Zhou
- 159-** ML4430: Subset Selection by Pareto Optimization with Recombination  
Chao Qian, Chao Bian, Chao Feng
- 160-** ML4434: Diversified Interactive Recommendation with Implicit Feedback  
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**478- VIS10343:** Convolutional Hierarchical Attention Network for Query-Focused Video Summarization

Shuwen Xiao, Zhou Zhao, Zijian Zhang, Xiaohui Yan, Min Yang

**479- VIS10366:** Group-Wise Dynamic Dropout Based on Latent Semantic Variations

Zhiwei Ke, Zhiwei Wen, Weicheng Xie, Yi Wang, Linlin Shen

**480- VIS10390:** Region-Based Global Reasoning Networks

Chuanming Wang, Huiyuan Fu, Charles X. Ling, Peilun Du, Huadong Ma

## **EAAI-20**

**481- EAAI13:** Coding in the Liberal Arts through Natural Language Processing and Machine Learning

Ursula Wolz and Jennifer Wilson

**482- EAAI42:** Minecraft as a Platform for Project-Based Learning in AI

Sameer Singh

**483- EAAI62:** Using Cloud Tools for Literate Programming to Redesign an AI course for Non-traditional College Students

Maria Hwang and Calvin Williamson

## **International Science and Engineering Fair AAAI Award Winners**

### *First Prize*

**484-** Looking through Walls with Artificial Intelligence: An Innovative Solution for Real-Time Retrieval of the Human Figure behind Visual Obstruction

Kevin Meng (Plano, Texas, USA)

### *Second Prize*

**485-** The Development of a Holistic System for Broad-Spectrum Crop Disease Diagnosis and Treatment

Pranav Senthilvel and Shreshth Srivastava (Prospect, Kentucky, USA)

### *Third Prize*

**486-** Real-Time Freespace Segmentation Using Deep Learning on Autonomous Robots for Detection of Negative Obstacles

Anish Singhani (San Ramon, California, USA)

## **Doctoral Consortium**

**487- DC267:** Interpreting Multimodal Machine Learning Models Trained for Emotion Recognition to Address Robustness and Privacy Concerns

Mimansa Jaiswal

**488- DC283:** Abstract Rule Based Pattern Learning with Neural Networks

Radha Manisha Kopparti

**489- DC288:** Hybrid Approaches to Fine-Grained Emotion Detection in Social Media Data

Annika Marie Schoene

**490- DC294:** Explainable Agency in Reinforcement Learning Agents

Prashan Madumal

**491- DC298:** Explainability in Autonomous Pedagogical Agents

Silvia Tulli

**492- DC301:** Developing a Machine Learning Tool for Dynamic Cancer Treatment Strategies

Jiaming Zeng

**493- DC315:** Partial Correlation-Based Attention for Multivariate Time Series Forecasting

Won Kyung Lee

**494- DC317:** Abstract Constraints for Safe and Robust Robot Learning from Demonstration

Carl L. Mueller

**495- DC321:** Coalitional Strategic Behaviour in Collective Decision Making

Grzegorz Lisowski

**496- DC323:** Towards Adversarially Robust Knowledge Graph Embeddings

Peru Bhardwaj

**497- DC326:** Understanding Generalization in Neural Networks for Robustness against Adversarial Vulnerabilities

Subhajit Chaudhury

**498- DC329:** Optimal Auction Based Automated Negotiation in Realistic Decentralized Market Environments

Pankaj Mishra, Ahmed Maustafa, Takayuki Ito, Minjie Zhang

**499- DC332:** Modelling a Conversational Agent with Complex Emotional Intelligence

Billal Belainine, Fatiha Sadat, Hakim Lounis

**500- DC336:** A Reinforcement Learning Approach to Strategic Belief Revelation with Social Influence

Patrick Shepherd, Judy Goldsmith

**501- DC342:** Efficient Predictive Uncertainty Estimators for Deep Probabilistic Models

Julissa Villanueva Llerena, Denis Detratani Maua

**502- DC346:** Quantum Probabilistic Models Using Feynman Diagram Rules for Better Understanding the Information Diffusion Dynamics in Online Social Networks

Ece C. Mutlu

**503- DC370:** Modeling Dynamic Behaviors within Population

Nazgol Tavabi

## **Undergraduate Consortium**

**504- UC707:** Generating Crochet patterns with Recurrent Neural networks

Proscovia Nakiranda

**505- UC726:** Fairness in Machine Learning: Quantifying the Effect of Unrepresentative Training Data on Intervention Performance  
Jessica Dai

**506- UC727:** Reconstructing Training Sets by Observing Sequential Updates  
William Jang

**507- UC728:** Robustness in Macro-Action-Based Deep Multi-Agent Reinforcement Learning  
Joshua Hoffman

**508- UC740:** Incremental Open World Reference Resolution  
Thomas Bennett

**509- UC741:** Nonparametric Human Follower Models  
John Nguyen

**510- UC742:** Ranking to Detect Users Involved in Blackmarket-based Collusive Retweeting Activities  
Brihi Joshi

**511- UC769:** Activity Recognition Using Deep Convolutional Networks for Classification in the SHL Recognition Challenge  
Michael Sloma

**512- UC772:** Human-in-the-Loop Gaussian Process-Based Coverage in Multi-Robot Settings  
Andrew McDonald

**513- UC775:** Various Perspectives of Studying Signals for Evaluating the Credibility of Online Sources of Information  
Khonzodakhon Umarova

**514- UC776:** Harmful Feedback Loops in Unequitable Criminal Justice AI Models  
Pazia Bermudez-Silverman

**515- UC780:** Search Tree Pruning for Progressive Neural Architecture Search Research Summary  
Deanna Flynn

## Student Abstracts

**516- SA429:** Generating Engaging Promotional Videos for E-Commerce Platforms  
Chang Liu, Han Yu, Yi Dong, Zhiqi Shen, Yingxue Yu, Ian Dixon, Zhanning Gao, Pan Wang, Peiran Ren, Xuansong Xie, Lizhen Cui, Chunyan Miao

**517- SA431:** Travel Time Prediction on Un-Monitored Roads: A Spatial Factorization Machine Based Approach  
Lile Li, Wei Liu

**518- SA437:** Link Prediction Between Group Entities in Knowledge Graphs  
Jialin Su, Yuanzhuo Wang, Xiaolong Jin, Yantao Jia, Xueqi Cheng

**519- SA441:** Entity Type Enhanced Neural Model for Distantly Supervised Relation Extraction  
Long Bai, Xiaolong Jin, Chuanzhi Zhuang, Xueqi Cheng

**520- SA451:** Towards Consistent Variational Auto-Encoding  
Yijing Liu, Shuyu Lin, Ronald Clark

**521- SA452:** Dynamic Control of Probabilistic Simple Temporal Networks  
Michael Gao, Lindsay Popowski, James C. Boerkoel Jr.

**522- SA453:** Personalized Prediction of Trust Links in Social Networks  
Alexandre Parmentier, Robin Cohen

**523- SA456:** American Sign Language Recognition Using an FMCW Wireless Sensor  
Yuanqi Du, Nguyen Dang, Riley Wilkerson, Parth Pathak, Huzefa Rangwala, Jana Kosecka

**524- SA457:** Streaming Batch Gradient Tracking for Neural Network Training  
Siyuan Huang, Brian D. Hoskins, Matthew W. Daniels, Mark D. Stiles, Gina C. Adam

**525- SA459:** LatRec: Recognizing Goals in Latent Space  
Leonardo Amado, Felipe Meneguzzi

**526- SA462:** Opening the Black Box: Automatically Characterizing Software for Algorithm Selection  
Damir Pulatov, Lars Kotthoff

**527- SA464:** Trimodal Attention Module for Multimodal Sentiment Analysis  
Anirudh Bindiganavale Harish, Fatiha Sadat

**528- SA467:** Clearing Kidney Exchanges via Graph Neural Network Guided Tree Search  
Zeyu Zhao, John P. Dickerson

**529- SA476:** Hindi-English Hate Speech Detection: Author Profiling, Debiasing and Practical Perspectives  
Shivang Chopra, Ramit Sawhney, Puneet Mathur, Rajiv Ratn Shah

**530- SA480:** SATNet: Symmetric Adversarial Transfer Network Based on Two-Level Alignment Strategy Towards Cross-Domain Sentiment Classification  
Yu Cao, Hua Xu

**531- SA481:** Action Recognition and State Change Prediction in a Recipe Understanding Task Using a Lightweight Neural Network Model  
Qing Wan, Yoonsuck Choe

**532- SA483:** A Multi-Task Learning Machine Reading Comprehension Model for Noisy Document  
Zhijing Wu, Hua Xu

**533- SA488:** READ: Representation Extraction Over an Arbitrary District  
Donghyun Ahn, Hyunji Cha, Sungwon Han

**534- SA489:** ESAS: Towards Practical and Explainable Short Answer Scoring  
Palak Goenka, Mehak Iplani, Ramit Sawhney, Puneet Mathur, Rajiv Ratn Shah

**535- SA491:** Interactive Neural Network: Leveraging Part-of-Speech Window for Aspect Term Extraction  
Da Yin, Xiuyu Wu, Baobao Chang

**536- SA493:** KnowBias: Detecting Political Polarity in Long Text Content  
Aditya Saligrama

**537- SA494:** Learning to Classify the Wrong Answers for Multiple Choice Question Answering  
Hyeonday Kim, Pascale Fung

**538- SA497:** Attribute Noise Robust Binary Classification  
Aditya Petety, Sandhya Tripathi, N. Hemachandra

**539- SA498:** BattleNet: Capturing Advantageous Battlefield in RTS Games

Donghyeon Lee, Man-Je Kim, Chang Wook Ahn

**540- SA500:** Efficient Spatial-Temporal Rebalancing of Shareable Bikes

Zichao Deng, Anqi Tu, Zelei Liu, Han Yu

**541- SA503:** Generative Adversarial Imitation Learning from Failed Experiences

Jiacheng Zhu, Jiahao Lin, Meng Wang, Yingfeng Chen, Changjie Fan, Chong Jiang, Zongzhang Zhang

**542- SA504:** Iterative Learning for Reliable Underwater Link Adaptation

Junghun Byun, Yong-Ho Cho, Tae-Ho Im, Hak-Lim Ko, Kyung-Seop Shin, Ohyun Jo

**543- SA509:** Deep Ranking for Style-Aware Room Recommendations

Ilkay Yildiz, Esra Ataer-Cansizoglu, Hantian Liu, Peter Golbus, Ozan Tezcan, Jae-Woo Choi

**544- SA513:** Structure-Based Drug-Drug Interaction Detection via Expressive Graph Convolutional Networks and Deep Sets

Mengying Sun, Fei Wang, Olivier Elemento, Jiayu Zhou

**545- SA514:** Improving Semantic Parsing using Statistical Word Sense Disambiguation

Ritwik Bose, Siddharth Vashishtha, James Allen

**546- SA515:** VECA: A Method for Detecting Overfitting in Neural Networks

Liangzhu Ge, Yuexian Hou, Yaju Jiang, Shuai Yao, Chao Yang

**547- SA522:** Exploring Abstract Concepts for Image Privacy Prediction in Social Networks

Gabriele Galfré, Cornelia Caragea

**548- SA523:** Towards an Integrative Educational Recommender for Lifelong Learners

Sahan Bulathwela, María Pérez Ortiz, Emine Yilmaz, John Shawe-Taylor

**549- SA524:** Combating False Negatives in Adversarial Imitation Learning

Konrad Zolna, Chitwan Saharia, Leonard Boussioux, David Yu-Tung Hui, Maxime Chevalier-Boisvert, Dzmityr Bahdanau, Yoshua Bengio

**550- SA525:** Breakdown Detection in Negotiation Dialogues

Atsuki Yamaguchi, Katsuhide Fujita

**551- SA526:** Bayesian Adversarial Attack on Graph Neural Networks

Xiao Liu, Jing Zhao, Shiliang Sun

**552- SA528:** Optimizing the Feature Selection Process for Better Accuracy in Datasets with a Large Number of Features

Xi Chen, Afsaneh Doryab

**553- SA532:** Keyphrase Generation for Scientific Articles Using GANs

Avinash Swaminathan, Raj Kuwar Gupta, Haimin Zhang, Debanjan Mahata, Rakesh Gosangi, Rajiv Ratn Shah

**554- SA542:** Emotion Analysis on Social Media: Impact of Psychological and Contextual Cues

Maitree Leekha, Mansi Agarwal, Ramit Sawhney, Rajiv Ratn Shah, Debanjan Mahata

**555- SA543:** Random Projections and alpha-shape to Support the Kernel Design

Daniel Moreira Cestari, Rodrigo Fernandes de Mello

**556- SA547:** Hierarchical Average Reward Policy Gradient Algorithms

Akshay Dharmavaram, Matthew Riemer, Shalabh Bhatnagar

**557- SA548:** Learning to Model Opponent Learning

Ian Davies, Zheng Tian, Jun Wang

**558- SA551:** A Multi-Task Learning Approach to Sarcasm Detection

Edoardo Savini, Cornelia Caragea

**559- SA553:** Fairness Does Not Imply Satisfaction

Andrew Searns, Hadi Hosseini

**560- SA559:** An Iterative Approach for Identifying Complaint Based Tweets in Social Media Platforms

Gyanesh Anand, Akash Gautam, Puneet Mathur, Rajiv Shah, Ramit Sawhney

## Demos

**1- DEMO258:** Deep Poetry: A Chinese Classical Poetry Generation System

Yusen Liu, Dayiheng Liu, Jiancheng Lv

**2- DEMO271:** DAMN: Defeasible Reasoning Tool for Multi-Agent Reasoning

Abdelraouf Hecham, Madalina Croitoru, Pierre Bisquert

**3- DEMO388:** PARTNER: Human-in-the-Loop Entity Name Understanding with Deep Learning

Kun Qian, Poornima Chozhiyath Raman, Yunyao Li, Lucian Popa

**4- DEMO401:** Watch the Flu': A Tweet Monitoring Tool for Epidemic Intelligence of Influenza in Australia

Brian Jin, Aditya Joshi, Ross Sparks, Stephen Wan, Cécile Paris, C Raina MacIntyre

**5- DEMO410:** MAPF Scenario: Software for Evaluating MAPF Plans on Real Robots

Roman Barták, Jiří Švancara, Ivan Krasičenko

**6- DEMO424:** Diana's World: A Situated Multimodal Interactive Agent

Nikhil Krishnaswamy, Pradyumna Narayana, Rahul Bangar, Kyeongmin Rim, Dhruva Patil, David McNeely-White, Jaime Ruiz, Bruce Draper, Ross Beveridge, James Pustejovsky

**7- DEMO425:** Causal Knowledge Extraction through Large-Scale Text Mining

Oktie Hassanzadeh, Debarun Bhattacharjya, Mark Feblowitz, Kavitha Srinivas, Michael Perrone, Shirin Sohrabi, Michael Katz

**8- DEMO455:** GENO — Optimization for Classical Machine Learning Made Fast and Easy

Sören Laue, Matthias Mitterreiter, Joachim Giesen

## Monday, February 10

7:20 – 9:20 PM

### AI and the Web (AIW)

- 1-** AIW1194: Minimizing the Bag-of-Ngrams Difference for Non-Autoregressive Neural Machine Translation  
Chenze Shao, Jinchao Zhang, Yang Feng, Fandong Meng, Jie Zhou
- 2-** AIW1249: GRET: Global Representation Enhanced Transformer  
Rongxiang Weng, Haoran Wei, Shujian Huang, Heng Yu, Lidong Bing, Weihua Luo, Jiajun Chen
- 3-** AIW2863: Efficient Heterogeneous Collaborative Filtering without Negative Sampling for Recommendation  
Chong Chen, Min Zhang, Yongfeng Zhang, Weizhi Ma, Yiqun Liu, Shaoping Ma
- 4-** AIW3162: Knowledge Graph Alignment Network with Gated Multi-Hop Neighborhood Aggregation  
Zequn Sun, Chengming Wang, Wei Hu, Muhao Chen, Jian Dai, Wei Zhang, Yuzhong Qu
- 5-** AIW3186: Balancing Spreads of Influence in a Social Network  
Ruben Becker, Federico Corò, Gianlorenzo D'Angelo, Hugo Gilbert
- 6-** AIW3254: Unsupervised Neural Dialect Translation with Commonality and Diversity Modeling  
Yu Wan, Baosong Yang, Derek F. Wong, Lidia S. Chao, Haihua Du, Ben C.H. Ao
- 7-** AIW4003: Relatedness and TBox-Driven Rule Learning in Large Knowledge Bases  
Giuseppe Pirrò
- 8-** AIW4363: MetaMT, a Meta Learning Method Leveraging Multiple Domain Data for Low Resource Machine Translation  
Rumeng Li, Xun Wang, Hong Yu
- 9-** AIW4475: Mining Unfollow Behavior in Large-Scale Online Social Networks via Spatial-Temporal Interaction  
Haozhe Wu, Zhiyuan Hu, Jia Jia, Yaohua Bu, Xiangnan He, Tat-Seng Chua
- 10-** AIW4623: Gradient Method for Continuous Influence Maximization with Budget-Saving Considerations  
Wei Chen, Weizhong Zhang, Haoyu Zhao
- 11-** AIW4688: Question-Driven Purchasing Propensity Analysis for Recommendation  
Long Chen, Ziyu Guan, Qibin Xu, Qiong Zhang, Huan Sun, Guangyue Lu, Deng Cai
- 12-** AIW4802: D2D-LSTM: LSTM-Based Path Prediction of Content Diffusion Tree in Device-to-Device Social Networks  
Heng Zhang, Xiaofei Wang, Jiawen Chen, Chenyang Wang, Jianxin Li
- 13-** AIW5041: A Variational Point Process Approach for Social Event Sequences  
Zhen Pan, Zhenya Huang, Defu Lian, Enhong Chen
- 14-** AIW5202: Revisiting Graph Based Collaborative Filtering: A Linear Residual Graph Convolutional Network Approach  
Lei Chen, Le Wu, Richang Hong, Kun Zhang, Meng Wang
- 15-** AIW5874: Go from the General to the Particular: Multi-Domain Translation with Domain Transformation Networks  
Yong Wang, Longyue Wang, Shuming Shi, Victor O.K. Li, Zhaopeng Tu

**16-** AIW6145: Exponential Family Graph Embeddings  
Abdulkadir Çelikkanat, Fragkiskos D. Malliaros

**17-** AIW6422: Alignment-Enhanced Transformer for Constraining NMT with Pre-Specified Translations  
Kai Song, Kun Wang, Heng Yu, Yue Zhang, Zhongqiang Huang, Weihua Luo, Xiangyu Duan, Min Zhang

**18-** AIW6799: Learning with Unsure Responses  
Kunihiro Takeoka, Yuyang Dong, Masafumi Oyamada

**19-** AIW7067: Table2Analysis: Modeling and Recommendation of Common Analysis Patterns for Multi-Dimensional Data  
Mengyu Zhou, Tao Wang, Pengxin Ji, Shi Han, Dongmei Zhang

**20-** AIW7155: An End-to-End Visual-Audio Attention Network for Emotion Recognition in User-Generated Videos  
Sicheng Zhao, Yunsheng Ma, Yang Gu, Jufeng Yang, Tengfei Xing, Pengfei Xu, Runbo Hu, Hua Chai, Kurt Keutzer

**21-** AIW7366: Multi-Feature Discrete Collaborative Filtering for Fast Cold-Start Recommendation  
Yang Xu, Lei Zhu, Zhiyong Cheng, Jingjing Li, Jiande Sun

**22-** AIW7426: Author Name Disambiguation on Heterogeneous Information Network with Adversarial Representation Learning  
Haiwen Wang, Ruijie Wang, Chuan Wen, Shuhao Li, Yuting Jia, Weinan Zhang, Xinbing Wang

**23-** AIW7620: Social Influence Does Matter: User Action Prediction for In-Feed Advertising  
Hongyang Wang, Qingfei Meng, Ju Fan, Yuchen Li, Laizhong Cui, Xiaoman Zhao, Chong Peng, Gong Chen, Xiaoyong Du

**24-** AIW7804: Modeling Fluency and Faithfulness for Diverse Neural Machine Translation  
Yang Feng, Wanying Xie, Shuhao Gu, Chenze Shao, Wen Zhang, Zhengxin Yang, Dong Yu

**25-** AIW7823: Acquiring Knowledge from Pre-Trained Model to Neural Machine Translation  
Rongxiang Weng, Heng Yu, Shujian Huang, Shanbo Cheng, Weihua Luo

**26-** AIW8617: Balancing Quality and Human Involvement: an Effective Approach to Interactive Neural Machine Translation  
Tianxiang Zhao, Lemao Liu, Guoping Huang, Zhaopeng Tu, Huayang Li, Yingling Liu, Guiquan Liu, Shuming Shi

**27-** AIW9007: Towards Comprehensive Recommender Systems: Time-Aware Unified Recommendations Based on Listwise Ranking of Implicit Cross-Network Data  
Dilruk Perera, Roger Zimmermann

**28-** AIW9423: Infusing Knowledge into the Textual Entailment Task Using Graph Convolutional Networks  
Pavan Kapanipathi, Veronika Thost, Siva Sankalp Patel, Spencer Whitehead, Ibrahim Abdelaziz, Avinash Balakrishnan, Maria Chang, Kshitij Fadnis, Chulaka Gunasekara, Bassem Makni, Nicholas Mattei, Kartik Talamadupula, Achille Fokoue

**29-** AIW9616: Preserving Ordinal Consensus: Towards Feature Selection for Unlabeled Data  
Jun Guo, Heng Chang, Wenwu Zhu

### Applications (APP)

**30-** APP46: Geometry-Constrained Car Recognition Using a 3D Perspective Network  
Rui Zeng, Zongyuan Ge, Simon Denman, Sridha Sridharan, Clinton Fookes

- 31- APP311: Accurate Structured-Text Spotting for Arithmetical Exercise Correction**  
Yiqing Hu, Yan Zheng, Hao Liu, Deqiang Jiang, Yinsong Liu, Bo Ren
- 32- APP361: Learning to Generate Maps from Trajectories**  
Sijie Ruan, Cheng Long, Jie Bao, Chunyang Li, Zisheng Yu, Ruiyuan Li, Yuxuan Liang, Tianfu He, Yu Zheng
- 33- APP1016: RL-Duet: Online Music Accompaniment Generation Using Deep Reinforcement Learning**  
Nan Jiang, Sheng Jin, Zhiyao Duan, Changshui Zhang
- 34- APP1050: Attention Based Data Hiding with Generative Adversarial Networks**  
Chong Yu
- 35- APP1307: PEIA: Personality and Emotion Integrated Attentive Model for Music Recommendation on Social Media Platforms**  
Tiancheng Shen, Jia Jia, Yan Li, Yihui Ma, Yaohua Bu, Hanjie Wang, Bo Chen, Tat-Seng Chua, Wendy Hall
- 36- APP1692: Convergence of Opinion Diffusion is PSPACE-Complete**  
Dmitry Chistikov, Grzegorz Lisowski, Mike Paterson, Paolo Turrini
- 37- APP1703: Adversarial Deep Network Embedding for Cross-Network Node Classification**  
Xiao Shen, Quanyu Dai, Fu-lai Chung, Wei Lu, Kup-Sze Choi
- 38- APP2214: MetaLight: Value-Based Meta-Reinforcement Learning for Traffic Signal Control**  
Xinshi Zang, Huaxiu Yao, Guanjie Zheng, Nan Xu, Kai Xu, Zhenhui Li
- 39- APP3004: DeepDualMapper: A Gated Fusion Network for Automatic Map Extraction using Aerial Images and Trajectories**  
Hao Wu, Hanyuan Zhang, Xinyu Zhang, Weiwei Sun, Baihua Zheng, Yuning Jiang
- 40- APP3716: Generate (Non-Software) Bugs to Fool Classifiers**  
Hiromu Yakura, Youhei Akimoto, Jun Sakuma
- 41- APP4055: Gait Recognition for Co-Existing Multiple People Using Millimeter Wave Sensing**  
Zhen Meng, Song Fu, Jie Yan, Hongyuan Liang, Anfu Zhou, Shilin Zhu, Huadong Ma, Jianhua Liu, Ning Yang
- 42- APP4804: Graph Convolutional Networks with Markov Random Field Reasoning for Social Spammer Detection**  
Yongji Wu, Defu Lian, Yiheng Xu, Le Wu, Enhong Chen
- 43- APP5506: Continuous Multiagent Control Using Collective Behavior Entropy for Large-Scale Home Energy Management**  
Jianwen Sun, Yan Zheng, Jianye Hao, Zhaopeng Meng, Yang Liu
- 44- APP5649: Adaptive Greedy versus Non-adaptive Greedy for Influence Maximization**  
Wei Chen, Binghui Peng, Grant Schoenebeck, Biaoshuai Tao
- 45- APP6104: Predictive Student Modeling in Educational Games with Multi-Task Learning**  
Michael Geden, Andrew Emerson, Jonathan Rowe, Roger Azevedo, James Lester
- 46- APP6270: Scalable and Generalizable Social Bot Detection through Data Selection**  
Kai-Cheng Yang, Onur Varol, Pik-Mai Hui, Filippo Menczer
- 47- APP6392: Graduate Employment Prediction with Bias**  
Teng Guo, Feng Xia, Shihao Zhen, Xiaomei Bai, Dongyu Zhang, Zitao Liu, Jiliang Tang
- 48- APP6479: Semi-Supervised Hierarchical Recurrent Graph Neural Network for City-Wide Parking Availability Prediction**  
Weijia Zhang, Hao Liu, Yanchi Liu, Jingbo Zhou, Hui Xiong
- 49- APP6730: Generating Adversarial Examples for Holding Robustness of Source Code Processing Models**  
Huangzhao Zhang, Zhuo Li, Ge Li, Lei Ma, Yang Liu, Zhi Jin
- 50- APP7093: ACTIVETHIEF: Model Extraction Using Active Learning and Unannotated Public Data**  
Soham Pal, Yash Gupta, Aditya Shukla, Aditya Kanade, Shirish Shevade, Vinod Ganapathy
- 51-APP7952: Instance-Wise Dynamic Sensor Selection for Human Activity Recognition**  
Xiaodong Yang, Yiqiang Chen, Hanchao Yu, Yingwei Zhang, Wang Lu, Ruizhe Sun
- 52- APP8266: Robust Low-Rank Discovery of Data-Driven Partial Differential Equations**  
Jun Li, Gan Sun, Guoshuai Zhao, Li-wei H. Lehman
- 53- APP8297: Accelerating and Improving AlphaZero Using Population Based Training**  
Ti-Rong Wu, Ting-Han Wei, I-Chen Wu
- 54- APP8387: Rumor Detection on Social Media with Bi-Directional Graph Convolutional Networks**  
Tian Bian, Xi Xiao, Tingyang Xu, Peilin Zhao, Wenbing Huang, Yu Rong, Junzhou Huang
- 55- APP8427: Type-Aware Anchor Link Prediction across Heterogeneous Networks Based on Graph Attention Network**  
Xiaoxue Li, Yanmin Shang, Yanan Cao, Yangxi Li, Jianlong Tan, Yanbing Liu
- 56- APP9004: Bursting the Filter Bubble: Fairness-Aware Network Link Prediction**  
Farzan Masrour, Tyler Wilson, Heng Yan, Pang-Ning Tan, Abdol-Hossein Esfahanian
- 57- APP9198: Beyond Digital Domain: Fooling Deep Learning Based Recognition System in Physical World**  
Kaichen Yang, Tzungyu Tsai, Honggang Yu, Tsung-Yi Ho, Yier Jin
- 58- APP9225: FuzzE: Fuzzy Fairness Evaluation of Offensive Language Classifiers on African-American English**  
Anthony Rios
- 59- APP9926: Finding Minimum-Weight Link-Disjoint Paths with a Few Common Nodes**  
Binglin Tao, Mingyu Xiao, Jingyang Zhao
- Cognitive Systems (CS)**
- 60- CS2895: STEP: Spatial Temporal Graph Convolutional Networks for Emotion Perception from Gaits**  
Uttaran Bhattacharya, Trisha Mittal, Rohan Chandra, Tanmay Randhavane, Aniket Bera, Dinesh Manocha
- 61- CS4411: M3ER: Multiplicative Multimodal Emotion Recognition Using Facial, Textual, and Speech Cues**  
Trisha Mittal, Uttaran Bhattacharya, Rohan Chandra, Aniket Bera, Dinesh Manocha

## Constraint Satisfaction and Optimization (CSO)

**62-** CSO1117: Incremental Symmetry Breaking Constraints for Graph Search Problems  
Avraham Itzhakov, Michael Codish

**63-** CSO2306: Finding Good Subtrees for Constraint Optimization Problems Using Frequent Pattern Mining  
Hongbo Li, Jimmy H.M. Lee, He Mi, Minghao Yin

**64-** CSO3210: Explaining Propagators for String Edit Distance Constraints  
Felix Winter, Nysret Musliu, Peter J. Stuckey

**65-** CSO3896: SPAN: A Stochastic Projected Approximate Newton Method  
Xunpeng Huang, Xianfeng Liang, Zhengyang Liu, Lei Li, Yue Yu, Yitan Li

**66-** CSO4359: Grammar Filtering for Syntax-Guided Synthesis  
Kairo Morton, William Hallahan, Elven Shum, Ruzica Piskac, Mark Santolucito

**67-** CSO5483: An Effective Hard Thresholding Method Based on Stochastic Variance Reduction for Nonconvex Sparse Learning  
Guannan Liang, Qianqian Tong, Chunjiang Zhu, Jinbo Bi

**68-** CSO5838: A Particle Swarm Based Algorithm for Functional Distributed Constraint Optimization Problems  
Moumita Choudhury, Saaduddin Mahmud, Md. Mosaddek Khan

**69-** CSO7068: Dynamic Programming for Predict+Optimise  
Emir Demirović, Peter J. Stuckey, James Bailey, Jeffrey Chan, Christopher Leckie, Kotagiri Ramamohanarao, Tias Guns

**70-** CSO7111: Representative Solutions for Bi-Objective Optimisation  
Emir Demirović, Nicolas Schwind

**71-** CSO7428: D-SPIDER-SFO: A Decentralized Optimization Algorithm with Faster Convergence Rate for Nonconvex Problems  
Taoxing Pan, Jun Liu, Jie Wang

**72-** CSO7439: Modelling Diversity of Solutions  
Linnea Ingmar, Maria Garcia de la Banda, Peter J. Stuckey, Guido Tack

**73-** CSO7649: Finding Most Compatible Phylogenetic Trees over Multi-State Characters  
Tuukka Korhonen, Matti Jarvisalo

## Computational Sustainability (CSUS)

**74-** CSUS5897: End-to-End Game-Focused Learning of Adversary Behavior in Security Games  
Andrew Perrault, Bryan Wilder, Eric Ewing, Aditya Mate, Bistra Dilkina, Milind Tambe

## Game Playing and Interactive Entertainment (GPIE)

**75-** GPIE147: Fast and Robust Face-to-Parameter Translation for Game Character Auto-Creation  
Tianyang Shi, Zhengxia Zou, Yi Yuan, Changjie Fan

**76-** GPIE1123: Mastering Complex Control in MOBA Games with Deep Reinforcement Learning  
Deheng Ye, Zhao Liu, Mingfei Sun, Bei Shi, Peilin Zhao, Hao Wu, Hongsheng Yu, Shaojie Yang, Xipeng Wu, Qingwei Guo, Qiaobo Chen, Yinyuting Yin, Hao Zhang, Tengfei Shi, Liang Wang, Qiang Fu, Wei Yang, Lanxiao Huang

**77-** GPIE6731: A Character-Centric Neural Model for Automated Story Generation  
Danyang Liu, Juntao Li, Meng-Hsuan Yu, Ziming Huang, Gongshen Liu, Dongyan Zhao, Rui Yan

**78-** GPIE7370: Generating Interactive Worlds with Text  
Angela Fan, Jack Urbanek, Pratik Ringshia, Emily Dinan, Emma Qian, Siddharth Karamcheti, Shrimai Prabhume, Douwe Kiela, Tim Rocktäschel, Arthur Szlam, Jason Weston

**79-** GPIE8133: Draft and Edit: Automatic Storytelling Through Multi-Pass Hierarchical Conditional Variational Autoencoder  
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**80-** GTEP3035: All-Pay Bidding Games on Graphs  
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**81-** GTEP3250: Multi-Type Resource Allocation with Partial Preferences  
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**82-** GTEP3356: Defending with Shared Resources on a Network  
Minming Li, Long Tran-Thanh, Xiaowei Wu

**83-** GTEP4068: Bidding in Smart Grid PDAs: Theory, Analysis and Strategy  
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**84-** GTEP5931: Fair Division Through Information Withholding  
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**85-** GTEP6344: Bounded Incentives in Manipulating the Probabilistic Serial Rule  
Zihe Wang, Zhide Wei, Jie Zhang

**86-** GTEP9035: Balancing the Tradeoff between Profit and Fairness in Rideshare Platforms During High-Demand Hours  
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**87-** GTEP9217: An Analysis Framework for Metric Voting Based on LP Duality  
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**88-** GTEP9455: Strongly Budget Balanced Auctions for Multi-Sided Markets  
Rica Gonen, Erel Segal-Halevi

**89-** GTEP9631: On the Max-Min Fair Stochastic Allocation of Indivisible Goods  
Yasushi Kawase, Hanna Sumita

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**90-** HAC1281: SADA: Semantic Adversarial Diagnostic Attacks for Autonomous Applications  
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**91-** HAC9127: Human-Machine Collaboration for Fast Land Cover Mapping  
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**92-** HAI1044: Graph-Based Decoding Model for Functional Alignment of Unaligned fMRI Data  
Weida Li, Mingxia Liu, Fang Chen, Daoqiang Zhang

**93-** HAI2747: Instance-Adaptive Graph for EEG Emotion Recognition  
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**94-** HAI2834: Harnessing GANs for Zero-Shot Learning of New Classes in Visual Speech Recognition  
Yaman Kumar, Dhruva Sahrawat, Shubham Maheshwari, Debanjan Mahata, Amanda Stent, Yifang Yin, Rajiv Ratn Shah, Roger Zimmermann

**95-** HAI2840: Learning Graph Convolutional Network for Skeleton-Based Human Action Recognition by Neural Searching  
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**96-** HAI4406: GaSPing for Utility  
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**97-** HAI6356: Understanding Medical Conversations with Scattered Keyword Attention and Weak Supervision from Responses  
Xiaoming Shi, Haifeng Hu, Wanxiang Che, Zhongqian Sun, Ting Liu, Junzhou Huang

**98-** HAI7330: Multi-Source Domain Adaptation for Visual Sentiment Classification  
Chuang Lin, Sicheng Zhao, Lei Meng, Tat-Seng Chua

**99-** HAI8773: Crowd-Assisted Disaster Scene Assessment with Human-AI Interactive Attention  
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**100-** HCC3482: HirePeer: Impartial Peer-Assessed Hiring at Scale in Expert Crowdsourcing Markets  
Yasmine Kotturi, Anson Kahng, Ariel D. Procaccia, Chinmay Kulkarni

**101-** HCC6132: Cost-Accuracy Aware Adaptive Labeling for Active Learning  
Ruijiang Gao, Maytal Saar-Tsechansky

**102-** HCC8901: BAR - A Reinforcement Learning Agent for Bounding-Box Automated Refinement  
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**104-** HSO8308: How the Duration of the Learning Period Affects the Performance of Random Gradient Selection Hyper-Heuristics  
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**106-** KRR2150: Efficient Model-Based Diagnosis of Sequential Circuits  
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**107-** KRR3019: Learning Hierarchy-Aware Knowledge Graph Embeddings for Link Prediction  
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**108-** KRR4154: Proportional Belief Merging  
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**109-** KRR4321: Forgetting an Argument  
Ringo Baumann, Dov Gabbay, Odinaldo Rodrigues

**110-** KRR5123: Aggregation of Perspectives Using the Constellations Approach to Probabilistic Argumentation  
Anthony Hunter, Kawsar Noor

**111-** KRR5378: Revisiting the Foundations of Abstract Argumentation – Semantics Based on Weak Admissibility and Weak Defense  
Ringo Baumann, Gerhard Brewka, Markus Ulbricht

**112-** KRR6200: Logics for Sizes with Union or Intersection  
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**113-** KRR7458: Deciding Acceptance in Incomplete Argumentation Frameworks  
Andreas Niskanen, Daniel Neugebauer, Matti Järvisalo, Jörg Rothe

**114-** KRR8986: InteractE: Improving Convolution-Based Knowledge Graph Embeddings by Increasing Feature Interactions  
Shikhar Vashishth, Soumya Sanyal, Vikram Nitin, Nilesch Agrawal, Partha Talukdar

**115-** KRR10320: Parameterised Resource-Bounded ATL  
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**116-** MAS1598: Partner Selection for the Emergence of Cooperation in Multi-Agent Systems Using Reinforcement Learning  
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**117-** MAS1604: Modeling Probabilistic Commitments for Maintenance Is Inherently Harder Than for Achievement  
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**118-** MAS1798: Clouseau: Generating Communication Protocols from Commitments  
Munindar P. Singh, Amit K. Chopra

**119-** MAS2099: From Few to More: Large-Scale Dynamic Multiagent Curriculum Learning  
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**120-** MAS2801: Distributed Stochastic Gradient Descent with Event-Triggered Communication  
Jemin George, Prudhvi Gurram

**121-** MAS3001: Idle Time Optimization for Target Assignment and Path Finding in Sortation Centers  
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**122-** MAS3951: An Operational Semantics for True Concurrency in BDI Agent Systems  
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**123-** MAS5101: Distributed Machine Learning through Heterogeneous Edge Systems  
Hanpeng Hu, Dan Wang, Chuan Wu



**124-** MAS5189: Implicit Coordination Using FOND Planning  
Thorsten Engesser, Tim Miller

**125-** MAS5441: ODSS: Efficient Hybridization for Optimal Coalition Structure Generation  
Narayan Changder, Samir Akinine, Sarvapali Ramchurn, Animesh Dutta

**126-** MAS5682: Learning to Communicate Implicitly by Actions  
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**127-** MAS7580: HS-CAI: A Hybrid DCOP Algorithm via Combining Search with Context-Based Inference  
Dingding Chen, Yanchen Deng, Ziyu Chen, Wenxin Zhang, Zhongshi He

**128-** MAS8313: Quantized Compressive Sampling of Stochastic Gradients for Efficient Communication in Distributed Deep Learning  
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**129-** MAS8325: Indirect Stochastic Gradient Quantization and Its Application in Distributed Deep Learning  
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**130-** ML134: R2MRF: Defocus Blur Detection via Recurrently Refining Multi-Scale Residual Features  
Chang Tang, Xinwang Liu, Xinzhong Zhu, En Zhu, Kun Sun, Pichao Wang, Lizhe Wang, Albert Zomaya

**131-** ML193: Google Research Football: A Novel Reinforcement Learning Environment  
Karol Kurach, Anton Raichuk, Piotr Stańczyk, Michał Zajac, Olivier Bachem, Lasse Espeholt, Carlos Riquelme, Damien Vincent, Marcin Michalski, Olivier Bousquet, Sylvain Gelly

**132-** ML368: URNet : User-Resizable Residual Networks with Conditional Gating Module  
Sangho Lee, Simyung Chang, Nojun Kwak

**133-** ML402: Beyond Dropout: Feature Map Distortion to Regularize Deep Neural Networks  
Yehui Tang, Yunhe Wang, Yixing Xu, Boxin Shi, Chao Xu, Chunjing Xu, Chang Xu

**134-** ML403: Pruning from Scratch  
Yulong Wang, Xiaolu Zhang, Lingxi Xie, Jun Zhou, Hang Su, Bo Zhang, Xiaolin Hu

**135-** ML476: Beyond Unfolding: Exact Recovery of Latent Convex Tensor Decomposition under Reshuffling  
Chao Li, Mohammad Emtiyaz Khan, Zhun Sun, Gang Niu, Bo Han, Shengli Xie, Qibin Zhao

**136-** ML509: Learning-Based Efficient Graph Similarity Computation via Multi-Scale Convolutional Set Matching  
Yunsheng Bai, Hao Ding, Ken Gu, Yizhou Sun, Wei Wang

**137-** ML564: Channel Pruning Guided by Classification Loss and Feature Importance  
Jinyang Guo, Wanli Ouyang, Dong Xu

**138-** ML591: Learning from the Past: Continual Meta-Learning with Bayesian Graph Neural Networks  
Yadan Luo, Zi Huang, Zheng Zhang, Ziwei Wang, Mahsa Baktashmotlagh, Yang Yang

**139-** ML831: Dynamical System Inspired Adaptive Time Stepping Controller for Residual Network Families  
Yibo Yang, Jianlong Wu, Hongyang Li, Xia Li, Tiancheng Shen, Zhouchen Lin

**140-** ML1040: Uncertainty-Aware Deep Classifiers Using Generative Models  
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**141-** ML1059: Count-Based Exploration with the Successor Representation  
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**142-** ML1081: Adversarial-Learned Loss for Domain Adaptation  
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**143-** ML1084: Bi-Directional Generation for Unsupervised Domain Adaptation  
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**144-** ML1273: Attribute Propagation Network for Graph Zero-Shot Learning  
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**145-** ML1406: Deep Embedded Complementary and Interactive Information for Multi-View Classification  
Jinglin Xu, Wenbin Li, Xinwang Liu, Dingwen Zhang, Ji Liu, Junwei Han

**146-** ML1421: A New Ensemble Adversarial Attack Powered by Long-Term Gradient Memories  
Zhaohui Che, Ali Borji, Guangtao Zhai, Suiyi Ling, Jing Li, Patrick Le Callet

**147-** ML1440: Sparsity-Inducing Binarized Neural Networks  
Peisong Wang, Xiangyu He, Gang Li, Tianli Zhao, Jian Cheng

**148-** ML1460: Incremental Multi-Domain Learning with Network Latent Tensor Factorization  
Adrian Bulat, Jean Kossaifi, Georgios Tzimiropoulos, Maja Pantic

**149-** ML1491: Weakly Supervised Disentanglement by Pairwise Similarities  
Junxiang Chen, Kayhan Batmanghelich

**150-** ML1506: Mega-Reward: Achieving Human-Level Play without Extrinsic Rewards  
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**151-** ML1602: Generative-Discriminative Complementary Learning  
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**152-** ML1627: A Multi-Scale Approach for Graph Link Prediction  
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**153-** ML1690: Binarized Neural Architecture Search  
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**154-** ML1718: Rank3DGAN: Semantic Mesh Generation Using Relative Attributes  
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**155-** ML1759: Structured Output Learning with Conditional Generative Flows  
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- 156-** ML1907: Reinforcing Neural Network Stability with Attractor Dynamics  
Hanming Deng, Yang Hua, Tao Song, Zhengui Xue, Ruhui Ma, Neil Robertson, Haibing Guan
- 157-** ML1980: An ADMM Based Framework for AutoML Pipeline Configuration  
Sijia Liu, Parikshit Ram, Deepak Vijaykeerthy, Djallel Bouneffouf, Gregory Bramble, Horst Samulowitz, Dakuo Wang, Andrew Conn, Alexander Gray
- 158-** ML2012: Random Fourier Features via Fast Surrogate Leverage Weighted Sampling  
Fanghui Liu, Xiaolin Huang, Yudong Chen, Jie Yang, Johan A.K. Suykens
- 159-** ML2041: Particle Filter Recurrent Neural Networks  
Xiao Ma, Peter Karkus, David Hsu, Wee Sun Lee
- 160-** ML2046: Joint Modeling of Local and Global Temporal Dynamics for Multivariate Time Series Forecasting with Missing Values  
Xianfeng Tang, Huaxiu Yao, Yiwei Sun, Charu Aggarwal, Prasenjit Mitra, Suhang Wang
- 161-** ML2073: Light Multi-Segment Activation for Model Compression  
Zhenhui Xu, Guolin Ke, Jia Zhang, Jiang Bian, Tie-Yan Liu
- 162-** ML2107: Attention-Over-Attention Field-Aware Factorization Machine  
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- 163-** ML2116: High Tissue Contrast MRI Synthesis Using Multi-Stage Attention-GAN for Glioma Segmentation  
Mohammad Hamghalam, Baiying Lei, Tianfu Wang
- 164-** ML2195: Linear Context Transform Block  
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- 165-** ML2262: Tensor-SVD Based Graph Learning for Multi-View Subspace Clustering  
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- 166-** ML2263: Neural Architecture Search Using Deep Neural Networks and Monte Carlo Tree Search  
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- 167-** ML2295: Neural Graph Embedding for Neural Architecture Search  
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- 168-** ML2312: Learning Agent Communication under Limited Bandwidth by Message Pruning  
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- 169-** ML2320: Lifelong Spectral Clustering  
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- 170-** ML2426: A Novel Model for Imbalanced Data Classification  
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- 171-** ML2511: A Knowledge-Aware Attentional Reasoning Network for Recommendation  
Qiannan Zhu, Xiaofei Zhou, Jia Wu, Jianlong Tan, Li Guo
- 172-** ML2545: Large-Scale Multi-View Subspace Clustering in Linear Time  
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- 173-** ML2727: An Intrinsically-Motivated Approach for Learning Highly Exploring and Fast Mixing Policies  
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- 174-** ML2731: Learning from Weak-Label Data: A Deep Forest Expedition  
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- 175-** ML2803: Adversarial Localized Energy Network for Structured Prediction  
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- 176-** ML2873: Fragmentation Coagulation Based Mixed Membership Stochastic Blockmodel  
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- 177-** ML2879: Atari-HEAD: Atari Human Eye-Tracking and Demonstration Dataset  
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- 178-** ML2928: Towards Query-Efficient Black-Box Adversary with Zeroth-Order Natural Gradient Descent  
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- 179-** ML2982: Regularized Training and Tight Certification for Randomized Smoothed Classifier with Provable Robustness  
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- 180-** ML3007: Fastened CROWN: Tightened Neural Network Robustness Certificates  
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- 181-** ML3076: Going Deep: Graph Convolutional Ladder-Shape Networks  
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- 182-** ML3077: Quadruply Stochastic Gradient Method for Large Scale Nonlinear Semi-Supervised Ordinal Regression AUC Optimization  
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- 183-** ML3089: Divide-and-Conquer Learning with Nyström: Optimal Rate and Algorithm  
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- 184-** ML3093: Effective Data Augmentation with Multi-Domain Learning GANs  
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- 185-** ML3134: Label Enhancement with Sample Correlations via Low-Rank Representation  
Haoyu Tang, Jihua Zhu, Qinghai Zheng, Jun Wang, Shanmin Pang, Zhongyu Li
- 186-** ML3143: Gradient Boosts the Approximate Vanishing Ideal  
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- 187-** ML3183: Scalable Probabilistic Matrix Factorization with Graph-Based Priors  
Jonathan Strahl, Jaakko Peltonen, Hiroshi Mamitsuka, Samuel Kaski
- 188-** ML3274: Towards Accurate Low Bit-Width Quantization with Multiple Phase Adaptations  
Zhaoyi Yan, Yemin Shi, Yaowei Wang, Mingkui Tan, Zheyang Li, Wenming Tan, Yonghong Tian

- 189-** ML3285: ODIN: ODE-Informed Regression for Parameter and State Inference in Time-Continuous Dynamical Systems  
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- 190-** ML3314: Random Intersection Graphs and Missing Data  
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- 191-** ML3316: DIANet: Dense-and-Implicit Attention Network  
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- 192-** ML3351: A Frank-Wolfe Framework for Efficient and Effective Adversarial Attacks  
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- 193-** ML3373: An Ordinal Data Clustering Algorithm with Automated Distance Learning  
Yiqun Zhang, Yiu-ming Cheung
- 194-** ML3380: Maximum Likelihood Embedding of Logistic Random Dot Product Graphs  
Luke O'Connor, Muriel Medard, Soheil Feizi
- 195-** ML3401: Improving the Robustness of Wasserstein Embedding by Adversarial PAC-Bayesian Learning  
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- 196-** ML3455: Deep Bayesian Nonparametric Learning of Rules and Plans from Demonstrations with a Learned Automaton Prior  
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- 197-** ML3463: Weighted Automata Extraction from Recurrent Neural Networks via Regression on State Spaces  
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- 198-** ML3515: AdaFilter: Adaptive Filter Fine-Tuning for Deep Transfer Learning  
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- 199-** ML3550: Decoupled Attention Network for Text Recognition  
Tianwei Wang, Yuanzhi Zhu, Lianwen Jin, Canjie Luo, Xiaoxue Chen, Yaqiang Wu, Qianying Wang, Mingxiang Cai
- 200-** ML3573: Infinity Learning: Learning Markov Chains from Aggregate Steady-State Observations  
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- 201-** ML3684: Towards Fine-Grained Temporal Network Representation via Time-Reinforced Random Walk  
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- 202-** ML3751: Shared Generative Latent Representation Learning for Multi-View Clustering  
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- 203-** ML3787: RTN: Reparameterized Ternary Network  
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- 204-** ML3861: Dynamic Graph Representation for Occlusion Handling in Biometrics  
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- 205-** ML3933: Efficient Neural Architecture Search via Proximal Iterations  
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- 206-** ML4001: Unified Graph and Low-Rank Tensor Learning for Multi-View Clustering  
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- 207-** ML4016: Efficient Residual Dense Block Search for Image Super-Resolution  
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- 208-** ML4058: Variational Adversarial Kernel Learned Imitation Learning  
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- 209-** ML4069: Learning Part Generation and Assembly for Structure-Aware Shape Synthesis  
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- 210-** ML4098: HoMM: Higher-Order Moment Matching for Unsupervised Domain Adaptation  
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- 211-** ML4139: Reinforcement Learning with Perturbed Rewards  
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- 212-** ML4191: Representing Closed Transformation Paths in Encoded Network Latent Space  
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- 213-** ML4216: Hierarchically Clustered Representation Learning  
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- 214-** ML4239: Exploratory Combinatorial Optimization with Reinforcement Learning  
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- 215-** ML4254: Algorithmic Improvements for Deep Reinforcement Learning Applied to Interactive Fiction  
Vishal Jain, William Fedus, Hugo Larochelle, Doina Precup, Marc G. Bellemare
- 216-** ML4289: Spatiotemporally Constrained Action Space Attacks on Deep Reinforcement Learning Agents  
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- 217-** ML4422: Discriminative Adversarial Domain Adaptation  
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- 218-** ML4423: Evaluating the Cross-Lingual Effectiveness of Massively Multilingual Neural Machine Translation  
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- 219-** ML4466: Adversarially Robust Distillation  
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- 220-** ML4495: Robust Self-Weighted Multi-View Projection Clustering  
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- 221-** ML4514: CGD: Multi-View Clustering via Cross-View Graph Diffusion  
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- 222-** ML4552: Online Knowledge Distillation with Diverse Peers  
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- 223-** ML4588: Co-GCN for Multi-View Semi-Supervised Learning  
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- 224-** ML4599: Object-Oriented Dynamics Learning through Multi-Level Abstraction  
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- 225-** ML4630: Universal Adversarial Training  
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- 226-** ML4640: Differentiable Algorithm for Marginalising Changepoints  
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- 227-** ML4723: MuMod: A Micro-Unit Connection Approach for Hybrid-Order Community Detection  
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- 228-** ML4837: Fatigue-Aware Bandits for Dependent Click Models  
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- 229-** ML4960: Semi-Supervised Streaming Learning with Emerging New Labels  
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- 230-** ML4996: Hierarchical Modes Exploring in Generative Adversarial Networks  
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- 231-** ML5040: Stealthy and Efficient Adversarial Attacks against Deep Reinforcement Learning  
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- 232-** ML5069: Adapting to Smoothness: A More Universal Algorithm for Online Convex Optimization  
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- 233-** ML5148: DeGAN : Data-Enriching GAN for Retrieving Representative Samples from a Trained Classifier  
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- 234-** ML5173: Towards Oracle Knowledge Distillation with Neural Architecture Search  
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- 235-** ML5327: An Attention-Based Graph Neural Network for Heterogeneous Structural Learning  
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- 236-** ML5434: Bounds and Complexity Results for Learning Coalition-Based Interaction Functions in Networked Social Systems  
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- 238-** ML5549: Exchangeable Generative Models with Flow Scans  
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- 239-** ML5577: Diversified Bayesian Nonnegative Matrix Factorization  
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**399-** RU3189: Recovering Causal Structures from Low-Order Conditional Independencies  
Marcel Wienöbst, Maciej Liśkiewicz

**400-** RU3531: A Near-Optimal Change-Detection Based Algorithm for Piecewise-Stationary Combinatorial Semi-Bandits  
Huozhi Zhou, Lingda Wang, Lav R. Varshney, Ee-Peng Lim

**401-** RU3579: Reliable and Efficient Anytime Skeleton Learning  
Rui Ding, Yanzhi Liu, Jingjing Tian, Zhouyu Fu, Shi Han, Dongmei Zhang

**402-** RU4174: Correcting Predictions for Approximate Bayesian Inference  
Tomasz Kuśmierczyk, Joseph Sakaya, Arto Klami

**403-** RU4209: Multi-Fidelity Multi-Objective Bayesian Optimization: An Output Space Entropy Search Approach  
Syrine Belakaria, Aryan Deshwal, Janardhan Rao Doppa

**404-** RU4369: Deception through Half-Truths  
Andrew Estornell, Sanmay Das, Yevgeniy Vorobeychik

**405-** RU4419: The Choice Function Framework for Online Policy Improvement  
Murugeswari Issakkimuthu, Alan Fern, Prasad Tadepalli

**406-** RU4712: A Simultaneous Discover-Identify Approach to Causal Inference in Linear Models  
Chi Zhang, Bryant Chen, Judea Pearl

**407-** RU4863: A Bayesian Approach for Estimating Causal Effects from Observational Data  
Johan Pensar, Topi Talvitie, Antti Hyttinen, Mikko Koivisto

**408-** RU5225: Adversarial Disentanglement with Grouped Observations  
Jozsef Nemeth

**409-** RU6037: Estimating Causal Effects Using Weighting-Based Estimators  
Yonghan Jung, Jin Tian, Elias Bareinboim

**410-** RU6175: Causal Discovery from Multiple Data Sets with Non-Identical Variable Sets  
Biwei Huang, Kun Zhang, Mingming Gong, Clark Glymour

**411-** RU6225: Gradient-Based Optimization for Bayesian Preference Elicitation  
Ivan Vendrov, Tyler Lu, Qingqing Huang, Craig Boutilier

**412-** RU6402: Robust Stochastic Bandit Algorithms under Probabilistic Unbounded Adversarial Attack  
Ziwei Guan, Kaiyi Ji, Donald J. Bucci Jr., Timothy Y. Hu, Joseph Palombo, Michael Liston, Yingbin Liang

**413-** RU6812: Safe Linear Stochastic Bandits  
Kia Khezeli, Eilyan Bitar

**414-** RU6821: Incentivized Exploration for Multi-Armed Bandits under Reward Drift  
Zhiyuan Liu, Huazheng Wang, Fan Shen, Kai Liu, Lijun Chen

**415-** RU7531: A Stochastic Derivative-Free Optimization Method with Importance Sampling: Theory and Learning to Control  
Adel Bibi, El Houcine Bergou, Ozan Sener, Bernard Ghanem, Peter Richtárik

**416-** RU8011: Experimental Design for Optimization of Orthogonal Projection Pursuit Models  
Mojmír Mutný, Johannes Kirschner, Andreas Krause

**417- RU9314:** Point-Based Methods for Model Checking in Partially Observable Markov Decision Processes  
Maxime Bouton, Jana Tumova, Mykel J. Kochenderfer

## Vision (VIS)

**418- VIS57:** Adaptive Unimodal Cost Volume Filtering for Deep Stereo Matching  
Youmin Zhang, Yimin Chen, Xiao Bai, Suihanjin Yu, Kun Yu, Zhiwei Li, Kuiyuan Yang

**419- VIS291:** Exploit and Replace: An Asymmetrical Two-Stream Architecture for Versatile Light Field Saliency Detection  
Yongri Piao, Zhengkun Rong, Miao Zhang, Huchuan Lu

**420- VIS331:** Gated Fully Fusion for Semantic Segmentation  
Xiangtai Li, Houlong Zhao, Lei Han, Yunhai Tong, Shaohua Tan, Kuiyuan Yang

**421- VIS443:** Learning Transferable Adversarial Examples via Ghost Networks  
Yingwei Li, Song Bai, Yuyin Zhou, Cihang Xie, Zhishuai Zhang, Alan Yuille

**422- VIS467:** Bi-Objective Continual Learning: Learning 'New' While Consolidating 'Known'  
Xiaoyu Tao, Xiaopeng Hong, Xinyuan Chang, Yihong Gong

**423- VIS498:** Attention-Based View Selection Networks for Light-Field Disparity Estimation  
Yu-Ju Tsai, Yu-Lun Liu, Ming Ouhyoung, Yung-Yu Chuang

**424- VIS665:** Clustering-Aware Multiple Graph Matching via Decayed Pairwise Matching Composition  
Tianzhe Wang, Zetian Jiang, Junchi Yan

**425- VIS697:** Hierarchical Knowledge Squeezed Adversarial Network Compression  
Peng Li, Changyong Shu, Yuan Xie, Yanyun Qu, Hui Kong

**426- VIS833:** Region Normalization for Image Inpainting  
Tao Yu, Zongyu Guo, Xin Jin, Shilin Wu, Zhibo Chen, Weiping Li, Zhizheng Zhang, Sen Liu

**427- VIS870:** Infrared-Visible Cross-Modal Person Re-Identification with an  $X$  Modality  
Diangang Li, Xing Wei, Xiaopeng Hong, Yihong Gong

**428- VIS909:** Geometry Sharing Network for 3D Point Cloud Classification and Segmentation  
Mingye Xu, Zhipeng Zhou, Yu Qiao

**429- VIS930:** Separate In Latent Space: Unsupervised Single Image Layer Separation  
Yunfei Liu, Feng Lu

**430- VIS951:** Multi-Label Classification with Label Graph Superimposing  
Ya Wang, Dongliang He, Fu Li, Xiang Long, Zhichao Zhou, Jinwen Ma, Shilei Wen

**431- VIS1246:** Reliability Does Matter: An End-to-End Weakly Supervised Semantic Segmentation Approach  
Bingfeng Zhang, Jimin Xiao, Yunchao Wei, Mingjie Sun, Kaizhu Huang

**432- VIS1288:** POST: Policy-Based Switch Tracking  
Ning Wang, Wengang Zhou, Guojun Qi, Houqiang Li

**433- VIS1339:** 3D Shape Completion with Multi-View Consistent Inference  
Tao Hu, Zhizhong Han, Matthias Zwicker

**434- VIS1435:** Image Cropping with Composition and Saliency Aware Aesthetic Score Map  
Yi Tu, Li Niu, Weijie Zhao, Dawei Cheng, Liqing Zhang

**435- VIS1482:** Shape-Aware Organ Segmentation by Predicting Signed Distance Maps  
Yuan Xue, Hui Tang, Zhi Qiao, Guanzhong Gong, Yong Yin, Zhen Qian, Chao Huang, Wei Fan, Xiaolei Huang

**436- VIS1559:** Deep Camouflage Images  
Qing Zhang, Gelin Yin, Yongwei Nie, Wei-Shi Zheng

**437- VIS1576:** Pointwise Rotation-Invariant Network with Adaptive Sampling and 3D Spherical Voxel Convolution  
Yang You, Yujing Lou, Qi Liu, Yu-Wing Tai, Lizhuang Ma, Cewu Lu, Weiming Wang

**438- VIS1673:** Deep Object Co-Segmentation via Spatial-Semantic Network Modulation  
Kaihua Zhang, Jin Chen, Bo Liu, Qingshan Liu

**439- VIS1829:** Cycle-CNN for Colorization Towards Real Monochrome-Color Camera Systems  
Xuan Dong, Weixin Li, Xiaojie Wang, Yunhong Wang

**440- VIS1848:** Generate, Segment and Refine: Towards Generic Manipulation Segmentation  
Peng Zhou, Bor-Chun Chen, Xintong Han, Mahyar Najibi, Abhinav Shrivastava, Ser Nam Lim, Larry S. Davis

**441- VIS1971:** Importance-Aware Semantic Segmentation in Self-Driving with Discrete Wasserstein Training  
Xiaofeng Liu, Yuzhuo Han, Song Bai, Yi Ge, Tianxing Wang, Xu Han, Site Li, Jane You, Jun Lu

**442- VIS2032:** Associative Variational Auto-Encoder with Distributed Latent Spaces and Associators  
Dae Ung Jo, Byeongju Lee, Jongwon Choi, Haanju Yoo, Jin Young Choi

**443- VIS2063:** Zero-Shot Sketch-Based Image Retrieval via Graph Convolution Network  
Zhaolong Zhang, Yuejie Zhang, Rui Feng, Tao Zhang, Weiguo Fan

**444- VIS2068:** Person Tube Retrieval via Language Description  
Hehe Fan, Yi Yang

**445- VIS2166:** Hybrid Graph Neural Networks for Crowd Counting  
Ao Luo, Fan Yang, Xin Li, Dong Nie, Zhicheng Jiao, Shangchen Zhou, Hong Cheng

**446- VIS2226:** Patchy Image Structure Classification Using Multi-Orientation Region Transform  
Xiaohan Yu, Yang Zhao, Yongsheng Gao, Shengwu Xiong, Xiaohui Yuan

**447- VIS2394:** Multimodal Structure-Consistent Image-to-Image Translation  
Che-Tsung Lin, Yen-Yi Wu, Po-Hao Hsu, Shang-Hong Lai

**448- VIS2580:** Relation-Guided Spatial Attention and Temporal Refinement for Video-Based Person Re-Identification  
Xingze Li, Wengang Zhou, Yun Zhou, Houqiang Li

**449- VIS2595:** Context Modulated Dynamic Networks for Actor and Action Video Segmentation with Language Queries  
Hao Wang, Cheng Deng, Fan Ma, Yi Yang

**450- VIS2913:** A Generalized Framework for Edge-Preserving and Structure-Preserving Image Smoothing  
Wei Liu, Pingping Zhang, Yinjie Lei, Xiaolin Huang, Jie Yang, Ian Reid

**451-** VIS2925: Relation Network for Person Re-Identification  
Hyunjong Park, Bumsub Ham

**452-** VIS3016: Rethinking the Image Fusion: A Fast Unified Image Fusion Network Based on Proportional Maintenance of Gradient and Intensity  
Hao Zhang, Han Xu, Yang Xiao, Xiaojie Guo, Jiayi Ma

**453-** VIS3214: Planar Prior Assisted PatchMatch Multi-View Stereo  
Qingshan Xu, Wenbing Tao

**454-** VIS3217: Learning Inverse Depth Regression for Multi-View Stereo with Correlation Cost Volume  
Qingshan Xu, Wenbing Tao

**455-** VIS3320: Spatial-Temporal Gaussian Scale Mixture Modeling for Foreground Estimation  
Qian Ning, Weisheng Dong, Fangfang Wu, Jinjian Wu, Jie Lin, Guangming Shi

**456-** VIS3796: Patch Proposal Network for Fast Semantic Segmentation of High-Resolution Images  
Tong Wu, Zhenzhen Lei, Bingqian Lin, Cuihua Li, Yanyun Qu, Yuan Xie

**457-** VIS3934: FD-GAN: Generative Adversarial Networks with Fusion-Discriminator for Single Image Dehazing  
Yu Dong, Yihao Liu, He Zhang, Shifeng Chen, Yu Qiao

**458-** VIS4063: Human Synthesis and Scene Compositing  
Mihai Zanfir, Elisabeta Oneata, Alin-Ionut Popa, Andrei Zanfir, Cristian Sminchisescu

**459-** VIS4075: Shape-Oriented Convolution Neural Network for Point Cloud Analysis  
Chaoyi Zhang, Yang Song, Lina Yao, Weidong Cai

**460-** VIS4133: Unicoder-VL: A Universal Encoder for Vision and Language by Cross-Modal Pre-Training  
Gen Li, Nan Duan, Yuejian Fang, Ming Gong, Daxin Jiang

**461-** VIS4299: When AWGN-Based Denoiser Meets Real Noises  
Yuqian Zhou, Jianbo Jiao, Haibin Huang, Yang Wang, Jue Wang, Honghui Shi, Thomas Huang

**462-** VIS4793: Multi-Speaker Video Dialog with Frame-Level Temporal Localization  
Qiang Wang, Pin Jiang, Zhiyi Guo, Yahong Han, Zhou Zhao

**463-** VIS5085: Fine-Grained Fashion Similarity Learning by Attribute-Specific Embedding Network  
Zhe Ma, Jianfeng Dong, Zhongzi Long, Yao Zhang, Yuan He, Hui Xue, Shouling Ji

**464-** VIS5422: Finding Action Tubes with a Sparse-to-Dense Framework  
Yuxi Li, Weiyao Lin, Tao Wang, John See, Rui Qian, Ning Xu, Limin Wang, Shugong Xu

**465-** VIS5440: Realistic Face Reenactment via Self-Supervised Disentangling of Identity and Pose  
Xianfang Zeng, Yusu Pan, Mengmeng Wang, Jiangning Zhang, Yong Liu

**466-** VIS6019: Tensor FISTA-Net for Real-Time Snapshot Compressive Imaging  
Xiaochen Han, Bo Wu, Zheng Shou, Xiao-Yang Liu, Yimeng Zhang, Linghe Kong

**467-** VIS6416: High-Order Residual Network for Light Field Super-Resolution  
Nan Meng, Xiaofei Wu, Jianzhuang Liu, Edmund Y. Lam

**468-** VIS6572: CircleNet for Hip Landmark Detection  
Hai Wu, Hongtao Xie, Chuanbin Liu, Zheng-Jun Zha, Jun Sun, Yongdong Zhang

**469-** VIS7703: Region-Adaptive Dense Network for Efficient Motion Deblurring  
Kuldeep Purohit, A.N. Rajagopalan

**470-** VIS8168: Modality-Balanced Models for Visual Dialogue  
Hyounghun Kim, Hao Tan, Mohit Bansal

**471-** VIS8923: Structure-Aware Feature Fusion for Unsupervised Domain Adaptation  
Qingchao Chen, Yang Liu

**472-** VIS10157: REST: Performance Improvement of a Black Box Model via RL-Based Spatial Transformation  
Jae Myung Kim, Hyungjin Kim, Chanwoo Park, Jungwoo Lee

**473-** VIS10261: Natural Image Matting via Guided Contextual Attention  
Yaoyi Li, Hongtao Lu

## Student Abstracts

*\* Denotes 3M contest finalist*

**474- \*SA266:** Providing Uncertainty-Based Advice for Deep Reinforcement Learning Agents  
Felipe Leno Da Silva, Pablo Hernandez-Leal, Bilal Kartal, Matthew E. Taylor

**475- \*SA389:** Combining Fine-Tuning with a Feature-Based Approach for Aspect Extraction on Reviews  
Xili Wang, Hua Xu, Xiaomin Sun, Guangcan Tao

**476- \*SA402:** Hypergraph Convolutional Network for Multi-Hop Knowledge Base Question Answering  
Jiale Han, Bo Cheng, Xu Wang

**477- \*SA417:** Constrained Self-Supervised Clustering for Discovering New Intents  
Ting-En Lin, Hua Xu, Hanlei Zhang

**478- \*SA435:** Automatic Text-Based Personality Recognition on Monologues and Multiparty Dialogues Using Attentive Networks and Contextual Embeddings  
Hang Jiang, Xianzhe Zhang, Jinho D. Choi

**479- \*SA463:** Complex Emotional Intelligence Learning Using Deep Neural Networks  
Belainine Bilal, Sadat Fatiha, Lounis Hakim

**480- \*SA471:** How to Be Effective in Signaling Games for Security and Sustainability with Uncertain Real-Time Information  
Elizabeth Bondi, Hoon Oh, Haifeng Xu, Fei Fang, Bistra Dilkina, Milind Tambe

**481- \*SA540:** Sample Complexity Bounds for RNNs with Application to Combinatorial Graph Problems  
Nil-Jana Akpınar, Bernhard Kratzwald, Stefan Feuerriegel

**482- \*SA549:** Transformer-Capsule Model for Intent Detection  
Aleksander Obuchowski, Michał Lew

- 483- \*SA568:** An Analytical Workflow for Clustering Forensic Images  
Sara Mousavi, Dylan Lee, Tatianna Griffin, Dawnie Steadman, Audris Mockus
- 484- \*SA575:** Improving First-Order Optimization Algorithms  
Ange Tato, Roger Nkambou
- 485- \*SA584:** Few Sample Learning Without Data Storage for Lifelong Stream Mining  
Zhuoyi Wang, Yigong Wang, Yu Lin, Bo Dong, Hemeng Tao, Latifur Khan
- 486- \*SA590:** Search Tree Pruning for Progressive Neural Architecture Search  
Deanna Flynn, P. Michael Furlong, Brian Coltin
- 487- \*SA595:** FourierSAT: A Fourier Expansion-Based Algebraic Framework for Solving Hybrid Boolean Constraints  
Anastasios Kyriillidis, Anshumali Shrivastava, Moshe Vardi, Zhiwei Zhang
- 488- \*SA601:** Semantics- and Syntax-Related Subvectors in the Skip-gram Embeddings  
Maxat Tezekbayev, Zhenisbek Assylbekov, Rustem Takhanov
- 489- \*SA604:** Multi-Robot Deep Reinforcement Learning with Macro-Actions  
Yuchen Xiao, Joshua Hoffman, Tian Xia, Christopher Amato
- 490- \*SA615:** Predicting Students' Attention Level with Interpretable Facial and Head Dynamic Features in an Online Tutoring System  
Shimeng Peng, Lujie Chen, Chufan Gao, Richard Jiarui Tong
- 491- \*SA638:** LGML: Logic Guided Machine Learning  
Joseph Scott, Maysum Panju, Vijay Ganesh
- 492- \*SA663:** Sampling Random Chordal Graphs by MCMC  
Wenbo Sun, Ivona Bezakova
- 493- \*SA690:** Leveraging BERT with Mixup for Sentence Classification  
Amit Jindal, Dwaraknath Gnaneshwar, Ramit Sawhney, Rajiv Ratn Shah
- 494- SA41:** When Low Resource NLP Meets Unsupervised Language Model: Meta-Pretraining Then Meta-Learning for Few-Shot Text Classification  
Shumin Deng, Ningyu Zhang, Zhanlin Sun, Jiaoyan Chen, Huajun Chen
- 495- SA81:** Optimal Exploration Algorithm of Multi-Agent Reinforcement Learning Methods  
Qisheng Wang, Qichao Wang, Xiao Li
- 496- SA126:** Adabot: Fault-Tolerant Java Decompiler  
Zhiming Li, Qing Wu, Kun Qian
- 497- SA140:** Multi-Channel Convolutional Neural Networks with Adversarial Training for Few-Shot Relation Classification  
Yuxiang Xie, Hua Xu, Congcong Yang, Kai Gao
- 498- SA257:** How to Predict Seawater Temperature for Sustainable Marine Aquaculture  
Masahito Okuno, Takanobu Otsuka
- 499- SA265:** A Simple Deconvolutional Mechanism for Point Clouds and Sparse Unordered Data  
Thomas Paniagua, John Lagergren, Greg Foderaro
- 500- SA268:** Action Graphs for Goal Recognition Problems with Inaccurate Initial States  
Helen Harman, Pieter Simoens
- 501- SA273:** Toward Operational Safety Verification of AI-Enabled CPS  
Imane Lamrani, Ayan Banerjee, Sandeep K.S. Gupta
- 502- SA275:** HGMAN: Multi-Hop and Multi-Answer Question Answering Based on Heterogeneous Knowledge Graph  
Xu Wang, Shuai Zhao, Bo Cheng, Jiale Han, Yingting Li, Hao Yang, Guoshun Nan
- 503- SA280:** Neural Dynamics and Gamma Oscillation on a Hybrid Excitatory-Inhibitory Complex Network  
Yuan Wang, Xia Shi, Bo Cheng, Junliang Chen
- 504- SA284:** Position-Based Social Choice Methods for Intransitive Incomplete Pairwise Vote Sets  
Julian Zucker
- 505- SA286:** Focusing on Detail: Deep Hashing Based on Multiple Region Details  
Quan Zhou, Xiushan Nie, Yang Shi, Xingbo Liu, Yilong Yin
- 506- SA385:** Cancer Treatment Classification with Electronic Medical Health Records  
Jiaming Zeng, Imon Banerjee, Michael Gensheimer, Daniel Rubin
- 507- SA391:** Modeling Involuntary Dynamic Behaviors to Support Intelligent Tutoring  
Mononito Goswami, Lujie Chen, Chufan Gao, Artur Dubrawski
- 508- SA393:** Third-Person Imitation Learning via Image Difference and Variational Discriminator Bottleneck  
Chong Jiang, Zongzhang Zhang, Zixuan Chen, Jiacheng Zhu, Junpeng Jiang
- 509- SA394:** Selecting Portfolios Directly Using Recurrent Reinforcement Learning  
Lin Li
- 510- SA395:** MUSIC COLLAB: An IoT And ML Based Solution for Remote Music Collaboration  
Nishtha Nayar, Divya Lohani
- 511- SA400:** RPM-Oriented Query Rewriting Framework for E-Commerce Keyword-Based Sponsored Search  
Xiuying Chen, Daorui Xiao, Shen Gao, Guojun Liu, Wei Lin, Bo Zheng, Dongyan Zhao, Rui Yan
- 512- SA403:** Multi-Agent Pattern Formation with Deep Reinforcement Learning  
Elhadji Amadou Oury Diallo, Toshiharu Sugawara
- 513- SA404:** Contention-Aware Mapping and Scheduling Optimization for NoC-Based MPSoCs  
Yupeng Zhou, Rongjie Yan, Anyu Cai, Yige Yan, Minghao Yin
- 514- SA408:** A Multi-Task Approach to Open Domain Suggestion Mining  
Minni Jain, Maitree Leekha, Mononito Goswami
- 515- SA409:** A QSAT Benchmark Based on Vertex-Folkman Problems  
David E. Narváez
- 516- SA418:** New Off-Board Solution for Predicting Vehicles' Intentions in the Highway On-Ramp Using Probabilistic Classifiers  
Zine El Abidine Kherroubi, Samir Aknine, Rebiha Bacha

**517- SA419: Session-Level User Satisfaction Prediction for Customer Service Chatbot in E-commerce**  
Riheng Yao, Shuangyong Song, Qiudan Li, Chao Wang, Huan Chen, Haiqing Chen, Daniel Dajun Zeng

**518- SA420: Who Are Controlled by the Same User ? Multiple Identities Deception Detection via Social Interaction Activity**  
Jiacheng Li, Chunyuan Yuan, Wei Zhou, Jingli Wang, Songlin Hu

**519- SA637: Submodel Decomposition for Solving Limited Memory Influence Diagrams**  
Junkyu Lee

## **Demos**

**1- DEMO458: Combining Machine Learning Models Using combo Library**  
Yue Zhao, Xuejian Wang, Cheng Cheng, Xueying Ding

**2- DEMO468: DRAGON-V: Detection and Recognition of Airplane Goals with Navigational Visualization**  
Christabel Wayllace, Sunwoo Ha, Yuchen Han, Jiaming Hu, Shayan Monadjemi, William Yeoh, Alvitta Ottley

**3- DEMO474: Cognitive Compliance: Assessing Regulatory Risk in Financial Advice Documents**  
Wanita Sherchan, Sue Ann Chen, Simon Harris, Nebula Alam, Khoi-Nguyen Tran, Christopher J. Butler

**4- DEMO475: CAiRE: An End-to-End Empathetic Chatbot**  
Zhaojiang Lin, Peng Xu, Genta Indra Winata, Farhad Bin Siddique, Zihan Liu, Jamin Shin, Pascale Fung

**5- DEMO482: Automatic Car Damage Assessment System: Reading and Understanding Videos as Professional Insurance Inspectors**  
Wei Zhang, Yuan Cheng, Xin Guo, Qingpei Guo, Jian Wang, Qing Wang, Chen Jiang, Meng Wang, Furong Xu, Wei Chu

**6- DEMO484: PresentationTrainer: Oral Presentation Support System for Impression-Related Feedback**  
Shengzhou Yi, Hiroshi Yumoto, Xueting Wang, Toshihiko Yamasaki

**7- DEMO495: Exploratory Navigation and Selective Reading**  
Natwar Modani, Paridhi Maheshwari, Harsh Deshpande, Saurab Sirpurkar, Diviya, Somak Aditya

**8- DEMO510: D-agree: Crowd Discussion Support System Based on Automated Facilitation Agent**  
Takayuki Ito, Shota Suzuki, Naoko Yamaguchi, Tomohiro Nishida, Kentaro Hiraishi, Kai Yoshino

**9- DEMO536: PulseSatellite: A Tool Using Human-AI Feedback Loops for Satellite Image Analysis in Humanitarian Contexts**  
Tomaz Logar, Joseph Bullock, Edoardo Nemni, Lars Bromley, John A. Quinn, Miguel Luengo-Oroz

## Tuesday, February 11

6:30 – 8:30 PM

### AI and the Web (AIW)

- 1- AIW74:** Progressive Feature Polishing Network for Salient Object Detection  
Bo Wang, Quan Chen, Min Zhou, Zhiqiang Zhang, Xiaogang Jin, Kun Gai
- 2- AIW441:** UCF-STAR: A Large-Scale Still Image Dataset for Understanding Human Actions  
Marjaneh Safaei, Pooyan Balouchian, Hassan Foroosh
- 3- AIW494:** Re-Attention for Visual Question Answering  
Wenya Guo, Ying Zhang, Xiaoping Wu, Jufeng Yang, Xiangrui Cai, Xiaojie Yuan
- 4- AIW1133:** Multimodal Summarization with Guidance of Multimodal Reference  
Junnan Zhu, Yu Zhou, Jiayun Zhang, Haoran Li, Chengqing Zong, Changliang Li
- 5- AIW1783:** Corpus-Level End-to-End Exploration for Interactive Systems  
Zhiwen Tang, Grace Hui Yang
- 6- AIW3674:** Multi-Channel Reverse Dictionary Model  
Lei Zhang, Fanchao Qi, Zhiyuan Liu, Yasheng Wang, Qun Liu, Maosong Sun
- 7- AIW3823:** Cross-Modal Attention Network for Temporal Inconsistent Audio-Visual Event Localization  
Hanyu Xuan, Zhenyu Zhang, Shuo Chen, Jian Yang, Yan Yan
- 8- AIW4000:** Learning Triple Embeddings from Knowledge Graphs  
Valeria Fionda, Giuseppe Pirrò
- 9- AIW5266:** Incremental Fairness in Two-Sided Market Platforms: On Smoothly Updating Recommendations  
Gourab K Patro, Abhijnan Chakraborty, Niloy Ganguly, Krishna P. Gummadi
- 10- AIW7144:** Functionality Discovery and Prediction of Physical Objects  
Lei Ji, Botian Shi, Xianglin Guo, Xilin Chen
- 11- AIW7575:** Masking Orchestration: Multi-Task Pretraining for Multi-Role Dialogue Representation Learning  
Tianyi Wang, Yating Zhang, Xiaozhong Liu, Changlong Sun, Qiong Zhang
- 12- AIW10285:** Modality to Modality Translation: An Adversarial Representation Learning and Graph Fusion Network for Multimodal Fusion  
Sijie Mai, Haifeng Hu, Songlong Xing
- 13- APP455:** Pose-Assisted Multi-Camera Collaboration for Active Object Tracking  
Jing Li, Jing Xu, Fangwei Zhong, Xiangyu Kong, Yu Qiao, Yizhou Wang
- 14- APP1337:** HDK: Toward High-Performance Deep-Learning-Based Kirchhoff Analysis  
Xinying Wang, Olamide Timothy Tawose, Feng Yan, Dongfang Zhao
- 15- APP1664:** RiskOracle: A Minute-Level Citywide Traffic Accident Forecasting Framework  
Zhengyang Zhou, Yang Wang, Xike Xie, Lianliang Chen, Hengchang Liu

**16- APP2122:** TrueLearn: A Family of Bayesian Algorithms to Match Lifelong Learners to Open Educational Resources  
Sahan Bulathwela, María Pérez-Ortiz, Emine Yilmaz, John Shawe-Taylor

**17- APP2172:** Graph Few-Shot Learning via Knowledge Transfer  
Huaxiu Yao, Chuxu Zhang, Ying Wei, Meng Jiang, Suhang Wang, Junzhou Huang, Nitesh V. Chawla, Zhenhui Li

**18- APP2220:** GMAN: A Graph Multi-Attention Network for Traffic Prediction  
Chuanpan Zheng, Xiaoliang Fan, Cheng Wang, Jianzhong Qi

**19- APP2343:** Order Matters: Semantic-Aware Neural Networks for Binary Code Similarity Detection  
Zeping Yu, Rui Cao, Qiyi Tang, Sen Nie, Junzhou Huang, Shi Wu

**20- APP2522:** Region Focus Network for Joint Optic Disc and Cup Segmentation  
Ge Li, Changsheng Li, Chan Zeng, Peng Gao, Guotong Xie

**21- APP2578:** PSENet: Psoriasis Severity Evaluation Network  
Yi Li, Zhe Wu, Shuang Zhao, Xian Wu, Yehong Kuang, Yangtian Yan, Shen Ge, Kai Wang, Wei Fan, Xiang Chen, Yong Wang

**22- APP2613:** Potential Passenger Flow Prediction: A Novel Study for Urban Transportation Development  
Yongshun Gong, Zhibin Li, Jian Zhang, Wei Liu, Jinfeng Yi

**23- APP2772:** Enhancing Personalized Trip Recommendation with Attractive Routes  
Jiqing Gu, Chao Song, Wenjun Jiang, Xiaomin Wang, Ming Liu

**24- APP3476:** Finding Needles in a Moving Haystack: Prioritizing Alerts with Adversarial Reinforcement Learning  
Liang Tong, Aron Laszka, Chao Yan, Ning Zhang, Yevgeniy Vorobeychik

**25- APP3821:** Learning the Graphical Structure of Electronic Health Records with Graph Convolutional Transformer  
Edward Choi, Zhen Xu, Yujia Li, Michael W. Dusenberry, Gerardo Flores, Emily Xue, Andrew M. Dai

**26- APP4431:** MixedAD: A Scalable Algorithm for Detecting Mixed Anomalies in Attributed Graphs  
Mengxiao Zhu, Haogang Zhu

**27- APP4913:** Dynamic Malware Analysis with Feature Engineering and Feature Learning  
Zhaoqi Zhang, Panpan Qi, Wei Wang

**28- APP5489:** Predicting AC Optimal Power Flows: Combining Deep Learning and Lagrangian Dual Methods  
Ferdinando Fioretto, Terrence W.K. Mak, Pascal Van Hentenryck

**29- APP5711:** CONAN: Complementary Pattern Augmentation for Rare Disease Detection  
Limeng Cui, Siddharth Biswal, Lucas M. Glass, Greg Lever, Jimeng Sun, Cao Xiao

**30- APP5758:** Robust Adversarial Objects against Deep Learning Models  
Tzungyu Tsai, Kaichen Yang, Tsung-Yi Ho, Yier Jin

**31- APP5769:** ConCare: Personalized Clinical Feature Embedding via Capturing the Healthcare Context  
Liantao Ma, Chaohe Zhang, Yasha Wang, Wenjie Ruan, Jiangtao Wang, Wen Tang, Xinyu Ma, Xin Gao, Junyi Gao

**32- APP6543: OF-MSRN: Optical Flow-Auxiliary Multi-Task Regression Network for Direct Quantitative Measurement, Segmentation and Motion Estimation**  
Chengqian Zhao, Cheng Feng, Dengwang Li, Shuo Li

**33- APP6627: OMuLeT: Online Multi-Lead Time Location Prediction for Hurricane Trajectory Forecasting**  
Ding Wang, Boyang Liu, Pang-Ning Tan, Lifeng Luo

**34- APP7044: Multi-Scale Anomaly Detection on Attributed Networks**  
Leonardo Gutiérrez-Gomez, Alexandre Bovet, Jean-Charles Delvenne

**35- APP7142: AirNet: A Calibration Model for Low-Cost Air Monitoring Sensors Using Dual Sequence Encoder Networks**  
Haomin Yu, Qingyong Li, Yangli-ao Geng, Yingjun Zhang, Zhi Wei

**36- APP8074: Spatial-Temporal Synchronous Graph Convolutional Networks: A New Framework for Spatial-Temporal Network Data Forecasting**  
Chao Song, Youfang Lin, Shengnan Guo, Huaiyu Wan

**37- APP8549: Generative Adversarial Regularized Mutual Information Policy Gradient Framework for Automatic Diagnosis**  
Yuan Xia, Jingbo Zhou, Zhenhui Shi, Chao Lu, Haifeng Huang

**38- APP8805: DeepAlerts: Deep Learning Based Multi-Horizon Alerts for Clinical Deterioration on Oncology Hospital Wards**  
Dingwen Li, Patrick G Lyons, Chenyang Lu, Marin Kollef

**39- APP9161: True Nonlinear Dynamics from Incomplete Networks**  
Chunheng Jiang, Jianxi Gao, Malik Magdon-Ismail

**40- APP9223: Learning Geo-Contextual Embeddings for Commuting Flow Prediction**  
Zhicheng Liu, Fabio Miranda, Weiting Xiong, Junyan Yang, Qiao Wang, Claudio T. Silva

**41- APP9280: Actor Critic Deep Reinforcement Learning for Neural Malware Control**  
Yu Wang, Jack W. Stokes, Mady Marinescu

**42- APP9722: Fairness-Aware Demand Prediction for New Mobility**  
An Yan, Bill Howe

## **Cognitive Modeling (CM)**

**43- CM4442: Transfer Reinforcement Learning Using Output-Gated Working Memory**  
Arthur S. Williams, Joshua L. Phillips

**44- CM5623: The Efficiency of Human Cognition Reflects Planned Information Processing**  
Mark K. Ho, David Abel, Jonathan D. Cohen, Michael L. Littman, Thomas L. Griffiths

**45- CM5642: Deep Spiking Delayed Feedback Reservoirs and Its Application in Spectrum Sensing of MIMO-OFDM Dynamic Spectrum Sharing**  
Kian Hamedani, Lingjia Liu, Shiya Liu, Haibo He, Yang Yi

**46- CM7191: Theory-Based Causal Transfer: Integrating Instance-Level Induction and Abstract-Level Structure Learning**  
Mark Edmonds, Xiaojian Ma, Siyuan Qi, Yixin Zhu, Hongjing Lu, Song-Chun Zhu

**47- CM7493: Synch-Graph: Multisensory Emotion Recognition through Neural Synchrony via Graph Convolutional Networks**  
Esma Mansouri-Benssassi, Juan Ye

**48- CM7822: Biologically Plausible Sequence Learning with Spiking Neural Networks**  
Zuozhu Liu, Thiparat Chotibut, Christopher Hillar, Shaowei Lin

## **Cognitive Systems (CS)**

**49- CS178: Machine Number Sense: A Dataset of Visual Arithmetic Problems for Abstract and Relational Reasoning**  
Wenhe Zhang, Chi Zhang, Yixin Zhu, Song-Chun Zhu

**50- CS4481: Generative Continual Concept Learning**  
Mohammad Rostami, Soheil Kolouri, James McClelland, Praveen Pilly

## **Constraint Satisfaction and Optimization (CSO)**

**51- CS02998: MIPaaL: Mixed Integer Program as a Layer**  
Aaron Ferber, Bryan Wilder, Bistra Dilkina, Milind Tambe

**52- CS03390: Augmenting the Power of (Partial) MaxSat Resolution with Extension**  
Javier Larrosa, Emma Rollon

**53- CS03843: A Simple and Efficient Tensor Calculus**  
Sören Laue, Matthias Mitterreiter, Joachim Giesen

**54- CS06059: Improved Filtering for the Euclidean Traveling Salesperson Problem in CLP(FD)**  
Alessandro Bertagnon, Marco Gavanelli

**55- CS06155: ADDMC: Weighted Model Counting with Algebraic Decision Diagrams**  
Jeffrey M. Dudek, Vu H. N. Phan, Moshe Y. Vardi

**56- CS06745: Accelerating Primal Solution Findings for Mixed Integer Programs Based on Solution Prediction**  
Jian-Ya Ding, Chao Zhang, Lei Shen, Shengyin Li, Bing Wang, Yinghui Xu, Le Song

**57- CS07298: Learning MAX-SAT from Contextual Examples for Combinatorial Optimisation**  
Mohit Kumar, Samuel Kolb, Stefano Teso, Luc De Raedt

**58- CS08649: Learning Optimal Decision Trees Using Caching Branch-and-Bound Search**  
Gaël Aglin, Siegfried Nijssen, Pierre Schaus

**59- CS08945: Smart Predict-and-Optimize for Hard Combinatorial Optimization Problems**  
Jayanta Mandi, Emir Demirović, Peter J. Stuckey, Tias Guns

**60- CS09334: Delay-Adaptive Distributed Stochastic Optimization**  
Zhaolin Ren, Zhengyuan Zhou, Linhai Qiu, Ajay Deshpande, Jayant Kalagnanam

**61- CS010258: Justifying All Differences Using Pseudo-Boolean Reasoning**  
Jan Elffers, Stephan Gocht, Ciaran McCreesh, Jakob Nordström

**62- CS010399: Estimating the Density of States of Boolean Satisfiability Problems on Classical and Quantum Computing Platforms**  
Tuhin Sahai, Anurag Mishra, Jose Miguel Pasini, Susmit Jha

## Computational Sustainability (CSUS)

**63-** CSUS5754: Deep Unsupervised Binary Coding Networks for Multivariate Time Series Retrieval  
Dixian Zhu, Dongjin Song, Yuncong Chen, Cristian Lumezanu, Wei Cheng, Bo Zong, Jingchao Ni, Takehiko Mizoguchi, Tianbao Yang, Haifeng Chen

**64-** CSUS6931: To Signal or Not To Signal: Exploiting Uncertain Real-Time Information in Signaling Games for Security and Sustainability  
Elizabeth Bondi, Hoon Oh, Haifeng Xu, Fei Fang, Bistra Dilkina, Milind Tambe

**65-** CSUS6968: Tensorized LSTM with Adaptive Shared Memory for Learning Trends in Multivariate Time Series  
Dongkuan Xu, Wei Cheng, Bo Zong, Dongjing Song, Jingchao Ni, Wenchao Yu, Yanchi Liu, Haifeng Chen, Xiang Zhang

## Game Playing and Interactive Entertainment (GPIE)

**66-** GPIE3470: FET-GAN: Font and Effect Transfer via K-Shot Adaptive Instance Normalization  
Wei Li, Yongxing He, Yanwei Qi, Zejian Li, Yongchuan Tang

## Game Theory and Economic Paradigms (GTEP)

**67-** GTEP792: VCG under Sybil (False-Name) Attacks – a Bayesian Analysis  
Yotam Gafni, Ron Lavi, Moshe Tennenholtz

**68-** GTEP1218: Nice Invincible Strategy for the Average-Payoff IPD  
Shiheng Wang, Fangzhen Lin

**69-** GTEP1547: A Multiarmed Bandit Based Incentive Mechanism for a Subset Selection of Customers for Demand Response in Smart Grids  
Shweta Jain, Sujit Gujar

**70-** GTEP1777: Computing Equilibria in Binary Networked Public Goods Games  
Sixie Yu, Kai Zhou, P. Jeffrey Brantingham, Yevgeniy Vorobeychik

**71-** GTEP1796: Preventing Arbitrage from Collusion When Eliciting Probabilities  
Rupert Freeman, David M. Pennock, Dominik Peters, Bo Waggoner

**72-** GTEP2128: Path Planning Problems with Side Observations – When Colonels Play Hide-and-Seek  
Dong Quan Vu, Patrick Loiseau, Alonso Silva, Long Tran-Thanh

**73-** GTEP2162: Multiagent Evaluation Mechanisms  
Tal Alon, Magdalen Dobson, Ariel D. Procaccia, Inbal Talgam-Cohen, Jamie Tucker-Foltz

**74-** GTEP4389: The Surprising Power of Hiding Information in Facility Location  
Safwan Hossain, Evi Micha, Nisarg Shah

**75-** GTEP4403: Can We Predict the Election Outcome from Sampled Votes?  
Evi Micha, Nisarg Shah

**76-** GTEP5092: A Simple, Fast, and Safe Mediator for Congestion Management  
Kei Ikegami, Kyohei Okumura, Takumi Yoshikawa

**77-** GTEP6063: Deep Learning-Powered Iterative Combinatorial Auctions  
Jakob Weissteiner, Sven Seuken

**78-** GTEP6150: Strategy-Proof and Non-Wasteful Multi-Unit Auction via Social Network  
Takehiro Kawasaki, Nathanaël Barrot, Seiji Takanashi, Taiki Todo, Makoto Yokoo

**79-** GTEP6161: On the Convergence of Model Free Learning in Mean Field Games  
Romuald Elie, Julien Pérolat, Mathieu Laurière, Matthieu Geist, Olivier Pietquin

**80-** GTEP6620: Reinforcement Mechanism Design: With Applications to Dynamic Pricing in Sponsored Search Auctions  
Weiran Shen, Binghui Peng, Hanpeng Liu, Michael Zhang, Ruohan Qian, Yan Hong, Zhi Guo, Zongyao Ding, Pengjun Lu, Pingzhong Tang

**81-** GTEP6724: The Effectiveness of Peer Prediction in Long-Term Forecasting  
Debmalya Mandal, Goran Radanović, David C. Parkes

**82-** GTEP6960: Optimal Common Contract with Heterogeneous Agents  
Shenke Xiao, Zihe Wang, Mengjing Chen, Pingzhong Tang, Xiwang Yang

**83-** GTEP7844: Approval-Based Apportionment  
Markus Brill, Paul Gözl, Dominik Peters, Ulrike Schmidt-Kraepelin, Kai Wilker

**84-** GTEP8061: Electing Successive Committees: Complexity and Algorithms  
Robert Bredereck, Andrzej Kaczmarczyk, Rolf Niedermeier

**85-** GTEP8527: Strategyproof Mechanisms for Friends and Enemies Games  
Michele Flammini, Bojana Kodric, Giovanna Varricchio

**86-** GTEP8710: Repeated Multimarket Contact with Private Monitoring: A Belief-Free Approach  
Atsushi Iwasaki, Tadashi Sekiguchi, Shun Yamamoto, Makoto Yokoo

**87-** GTEP8936: Individual-Based Stability in Hedonic Diversity Games  
Niclas Boehmer, Edith Elkind

**88-** GTEP9014: Facility Location Problem with Capacity Constraints: Algorithmic and Mechanism Design Perspectives  
Haris Aziz, Hau Chan, Barton E. Lee, Bo Li, Toby Walsh

**89-** GTEP9394: Limitations of Incentive Compatibility on Discrete Type Spaces  
Taylor Lundy, Hu Fu

**90-** GTEP9922: Information Elicitation Mechanisms for Statistical Estimation  
Yuqing Kong, Grant Schoenebeck, Biaoshuai Tao, Fang-Yi Yu

**91-** GTEP10043: Solving Online Threat Screening Games Using Constrained Action Space Reinforcement Learning  
Sanket Shah, Arunesh Sinha, Pradeep Varakantham, Andrew Perrault, Milind Tambe

## Human-AI Collaboration (HAC)

**92-** HAC383: Reinforcement Learning from Imperfect Demonstrations under Soft Expert Guidance  
Mingxuan Jing, Xiaojian Ma, Wenbing Huang, Fuchun Sun, Chao Yang, Bin Fang, Huaping Liu

**93-** HAC3605: CoCoX: Generating Conceptual and Counterfactual Explanations via Fault-Lines  
Arjun R. Akula, Shuai Wang, Song-Chun Zhu



**94- HAC5191:** Relative Attributing Propagation: Interpreting the Comparative Contributions of Individual Units in Deep Neural Networks  
Woo Jeoung Nam, Shir Gur, Jaesik Choi, Lior Wolf, Seong-Whan Lee

**95- HAC6571:** Regression under Human Assistance  
Abir De, Paramita Koley, Niloy Ganguly, Manuel Gomez-Rodriguez

**96- HAC6889:** A Human-AI Loop Approach for Joint Keyword Discovery and Expectation Estimation in Micropost Event Detection  
Akansha Bhardwaj, Jie Yang, Philippe Cudré-Mauroux

**97- HAC9743:** Querying to Find a Safe Policy Under Uncertain Safety Constraints in Markov Decision Processes  
Shun Zhang, Edmund H. Durfee, Satinder Singh

## Knowledge Representation and Reasoning (KRR)

**98- KRR277:** Blameworthiness in Security Games  
Pavel Naumov, Jia Tao

**99- KRR1534:** Asymptotic Risk of Bézier Simplex Fitting  
Akinori Tanaka, Akiyoshi Sannai, Ken Kobayashi, Naoki Hamada

**100- KRR2278:** Few-Shot Knowledge Graph Completion  
Chuxu Zhang, Huaxiu Yao, Chao Huang, Meng Jiang, Zhenhui Li, Nitesh V. Chawla

**101- KRR2859:** Path Ranking with Attention to Type Hierarchies  
Weiyu Liu, Angel Daruna, Zsolt Kira, Sonia Chernova

**102- KRR4560:** Rule-Guided Compositional Representation Learning on Knowledge Graphs  
Guanglin Niu, Yongfei Zhang, Bo Li, Peng Cui, Si Liu, Jingyang Li, Xiaowei Zhang

**103- KRR5054:** Structural Decompositions of Epistemic Logic Programs  
Markus Hecher, Michael Morak, Stefan Woltran

**104- KRR6805:** Learning Query Inseparable *ELH* Ontologies  
Ana Ozaki, Cosimo Persia, Andrea Mazzullo

**105- KRR6975:** Checking Chase Termination over Ontologies of Existential Rules with Equality  
David Carral, Jacopo Urbani

**106- KRR7209:** On the Expressivity of ASK Queries in SPARQL  
Xiaowang Zhang, Jan Van den Bussche, Kewen Wang, Heng Zhang, Xuanxing Yang, Zhiyong Feng

**107- KRR7843:** Towards Universal Languages for Tractable Ontology Mediated Query Answering  
Heng Zhang, Yan Zhang, Jia-Huai You, Zhiyong Feng, Guifei Jiang

**108- KRR8397:** Query Rewriting for Ontology-Mediated Conditional Answers  
Medina Andreşel, Magdalena Ortiz, Mantas Šimkus

**109- KRR8547:** Epistemic Integrity Constraints for Ontology-Based Data Management  
Marco Console, Maurizio Lenzerini

**110- KRR8971:** Contextual Parameter Generation for Knowledge Graph Link Prediction  
George Stoica, Otilia Stretcu, Emmanouil Antonios Platanios, Tom M. Mitchell, Barnabás Póczos

**111- KRR9149:** Graph Representations for Higher-Order Logic and Theorem Proving  
Aditya Paliwal, Sarah M. Loos, Markus N. Rabe, Kshitij Bansal, Christian Szegedy

## Multiagent Systems (MAS)

**112- MAS1513:** Arena: A General Evaluation Platform and Building Toolkit for Multi-Agent Intelligence  
Yuhang Song, Andrzej Wojcicki, Thomas Lukasiewicz, Jianyi Wang, Abi Aryan, Zhenghua Xu, Mai Xu, Zihan Ding, Lianlong Wu

**113- MAS2313:** Neighborhood Cognition Consistent Multi-Agent Reinforcement Learning  
Hangyu Mao, Wulong Liu, Jianye Hao, Jun Luo, Dong Li, Zhengchao Zhang, Jun Wang, Zhen Xiao

**114- MAS2318:** SMIX( $\lambda$ ): Enhancing Centralized Value Functions for Cooperative Multi-Agent Reinforcement Learning  
Chao Wen, Xinghu Yao, Yuhui Wang, Xiaoyang Tan

**115- MAS2405:** Bi-Level Actor-Critic for Multi-Agent Coordination  
Haifeng Zhang, Weizhe Chen, Zeren Huang, Minne Li, Yaodong Yang, Weinan Zhang, Jun Wang

**116- MAS2416:** Multi-Agent Game Abstraction via Graph Attention Neural Network  
Yong Liu, Weixun Wang, Yujing Hu, Jianye Hao, Xingguo Chen, Yang Gao

**117- MAS3062:** Fair Procedures for Fair Stable Marriage Outcomes  
Nikolaos Tziavelis, Ioannis Giannakopoulos, Rune Quist Johansen, Katerina Doka, Nectarios Koziris, Panagiotis Karras

**118- MAS3279:** Mechanism Design with Predicted Task Revenue for Bike Sharing Systems  
Hongtao Lv, Chaoli Zhang, Zhenzhe Zheng, Tie Luo, Fan Wu, Guihai Chen

**119- MAS3962:** Multi-Agent Actor-Critic with Hierarchical Graph Attention Network  
Heechang Ryu, Hayong Shin, Jinkyoo Park

**120- MAS4021:** A Variational Perturbative Approach to Planning in Graph-Based Markov Decision Processes  
Dominik Linzner, Heinz Koeppl

**121- MAS4330:** Improving Policies via Search in Cooperative Partially Observable Games  
Adam Lerer, Hengyuan Hu, Jakob Foerster, Noam Brown

**122- MAS4978:** Incentive-Compatible Classification  
Yakov Babichenko, Oren Dean, Moshe Tennenholtz

**123- MAS5248:** Learning the Value of Teamwork to Form Efficient Teams  
Ryan Beal, Narayan Changder, Timothy J. Norman, Sarvapali D. Ramchurn

**124- MAS5701:** Shapley Q-Value: A Local Reward Approach to Solve Global Reward Games  
Jianhong Wang, Yuan Zhang, Tae-Kyun Kim, Yunjie Gu

**125- MAS5764:** Communication Learning via Backpropagation in Discrete Channels with Unknown Noise  
Benjamin Freed, Guillaume Sartoretti, Jiaheng Hu, Howie Choset

**126- MAS6382:** Scalable Decision-Theoretic Planning in Open and Typed Multiagent Systems  
Adam Eck, Maulik Shah, Prashant Doshi, Leen-Kiat Soh

**127-** MAS8345: A Multi-Unit Profit Competitive Mechanism for Cellular Traffic Offloading  
Jun Wu, Yu Qiao, Lei Zhang, Chongjun Wang, Meilin Liu

**128-** MAS10031: Generative Attention Networks for Multi-Agent Behavioral Modeling  
Guangyu Li, Bo Jiang, Hao Zhu, Zhengping Che, Yan Liu

## Machine Learning (ML)

**129-** ML3: InstaNAS: Instance-Aware Neural Architecture Search  
An-Chieh Cheng, Chieh Hubert Lin, Da-Cheng Juan, Wei Wei, Min Sun

**130-** ML38: Regularized Wasserstein Means for Aligning Distributional Data  
Liang Mi, Wen Zhang, Yalin Wang

**131-** ML61: Distilling Portable Generative Adversarial Networks for Image Translation  
Hanting Chen, Yunhe Wang, Han Shu, Changyuan Wen, Chunjing Xu, Boxin Shi, Chao Xu, Chang Xu

**132-** ML176: Optimal Feature Transport for Cross-View Image Geo-Localization  
Yujiao Shi, Xin Yu, Liu Liu, Tong Zhang, Hongdong Li

**133-** ML337: Residual Neural Processes  
Byung-Jun Lee, Seunghoon Hong, Kee-Eung Kim

**134-** ML409: Semi-Supervised Learning under Class Distribution Mismatch  
Yanbei Chen, Xiatian Zhu, Wei Li, Shaogang Gong

**135-** ML484: Proximal Distilled Evolutionary Reinforcement Learning  
Cristian Bodnar, Ben Day, Pietro Lió

**136-** ML526: Logo-2K+: A Large-Scale Logo Dataset for Scalable Logo Classification  
Jing Wang, Weiqing Min, Sujuan Hou, Shengnan Ma, Yuanjie Zheng, Haishuai Wang, Shuqiang Jiang

**137-** ML546: Efficient Automatic CASH via Rising Bandits  
Yang Li, Jiawei Jiang, Jinyang Gao, Yingxia Shao, Ce Zhang, Bin Cui

**138-** ML606: Policy Search by Target Distribution Learning for Continuous Control  
Chuheng Zhang, Yuanqi Li, Jian Li

**139-** ML626: On the Anatomy of MCMC-Based Maximum Likelihood Learning of Energy-Based Models  
Erik Nijkamp, Mitch Hill, Tian Han, Song-Chun Zhu, Ying Nian Wu

**140-** ML659: AutoShrink: A Topology-Aware NAS for Discovering Efficient Neural Architecture  
Tunhou Zhang, Hsin-Pai Cheng, Zhenwen Li, Feng Yan, Chengyu Huang, Hai Li, Yiran Chen

**141-** ML669: Practical Federated Gradient Boosting Decision Trees  
Qinbin Li, Zeyi Wen, Bingsheng He

**142-** ML787: Cost-Effective Incentive Allocation via Structured Counterfactual Inference  
Romain Lopez, Chenchen Li, Xiang Yan, Junwu Xiong, Michael I. Jordan, Yuan Qi, Le Song

**143-** ML837: Representation Learning with Multiple Lipschitz-Constrained Alignments on Partially-Labeled Cross-Domain Data  
Songlei Jian, Liang Hu, Longbing Cao, Kai Lu

**144-** ML858: Gradient-Aware Model-Based Policy Search  
Pierluca D'Oro, Alberto Maria Metelli, Andrea Tirinzoni, Matteo Papini, Marcello Restelli

**145-** ML896: Multi-Label Causal Feature Selection  
Xingyu Wu, Bingbing Jiang, Kui Yu, Huanhuan Chen, Chunyan Miao

**146-** ML935: Loss-Based Attention for Deep Multiple Instance Learning  
Xiaoshuang Shi, Fuyong Xing, Yuanpu Xie, Zizhao Zhang, Lei Cui, Lin Yang

**147-** ML1071: Eigenvalue Normalized Recurrent Neural Networks for Short Term Memory  
Kyle Helfrich, Qiang Ye

**148-** ML1251: Stochastic Loss Function  
Qingliang Liu, Jinmei Lai

**149-** ML1264: Stable Prediction with Model Misspecification and Agnostic Distribution Shift  
Kun Kuang, Ruoxuan Xiong, Peng Cui, Susan Athey, Bo Li

**150-** ML1279: Reborn Filters: Pruning Convolutional Neural Networks with Limited Data  
Yehui Tang, Shan You, Chang Xu, Jin Han, Chen Qian, Boxin Shi, Chao Xu, Changshui Zhang

**151-** ML1335: Adaptive Trust Region Policy Optimization: Global Convergence and Faster Rates for Regularized MDPs  
Lior Shani, Yonathan Efroni, Shie Mannor

**152-** ML1342: Dual Relation Semi-Supervised Multi-Label Learning  
Lichen Wang, Yunyu Liu, Can Qin, Gan Sun, Yun Fu

**153-** ML1364: Multi-Stage Self-Supervised Learning for Graph Convolutional Networks on Graphs with Few Labeled Nodes  
Ke Sun, Zhouchen Lin, Zhanxing Zhu

**154-** ML1376: Look One and More: Distilling Hybrid Order Relational Knowledge for Cross-Resolution Image Recognition  
Shiming Ge, Kangkai Zhang, Haolin Liu, Yingying Hua, Shengwei Zhao, Xin Jin, Hao Wen

**155-** ML1448: Revisiting Image Aesthetic Assessment via Self-Supervised Feature Learning  
Kekai Sheng, Weiming Dong, Menglei Chai, Guohui Wang, Peng Zhou, Feiyue Huang, Bao-Gang Hu, Rongrong Ji, Chongyang Ma

**156-** ML1453: Generative Adversarial Networks for Video-to-Video Domain Adaptation  
Jiawei Chen, Yuexiang Li, Kai Ma, Yefeng Zheng

**157-** ML1536: Posterior-Guided Neural Architecture Search  
Yizhou Zhou, Xiaoyan Sun, Chong Luo, Zheng-Jun Zha, Wenjun Zeng

**158-** ML1540: Brain-Mediated Transfer Learning of Convolutional Neural Networks  
Satoshi Nishida, Yusuke Nakano, Antoine Blanc, Naoya Maeda, Masataka Kado, Shinji Nishimoto

**159-** ML1552: Adversarial Domain Adaptation with Domain Mixup  
Minghao Xu, Jian Zhang, Bingbing Ni, Teng Li, Chengjie Wang, Qi Tian, Wenjun Zhang

- 160-** ML1555: Object Instance Mining for Weakly Supervised Object Detection  
Chenhao Lin, Siwen Wang, Dongqi Xu, Yu Lu, Wayne Zhang
- 161-** ML1629: AutoDAL: Distributed Active Learning with Automatic Hyperparameter Selection  
Xu Chen, Brett Wujek
- 162-** ML1680: Uncorrected Least-Squares Temporal Difference with Lambda-Return  
Takayuki Osogami
- 163-** ML1790: Adversarial Learning of Privacy-Preserving and Task-Oriented Representations  
Taihong Xiao, Yi-Hsuan Tsai, Kihyuk Sohn, Manmohan Chandraker, Ming-Hsuan Yang
- 164-** ML1797: Label Error Correction and Generation through Label Relationships  
Zijun Cui, Yong Zhang, Qiang Ji
- 165-** ML1836: Multi-Task Driven Feature Models for Thermal Infrared Tracking  
Qiao Liu, Xin Li, Zhenyu He, Nana Fan, Di Yuan, Wei Liu, Yongsheng Liang
- 166-** ML1856: Unsupervised Nonlinear Feature Selection from High-Dimensional Signed Networks  
Qiang Huang, Tingyu Xia, Huiyan Sun, Makoto Yamada, Yi Chang
- 167-** ML1917: Scalable Methods for Computing State Similarity in Deterministic Markov Decision Processes  
Pablo Samuel Castro
- 168-** ML2075: Overcoming Catastrophic Forgetting by Neuron-Level Plasticity Control  
Inyoung Paik, Sangjun Oh, Taeyeong Kwak, Injung Kim
- 169-** ML2100: On the Discrepancy between the Theoretical Analysis and Practical Implementations of Compressed Communication for Distributed Deep Learning  
Aritra Dutta, El Houcine Bergou, Ahmed M. Abdelmoniem, Chen-Yu Ho, Atal Narayan Sahu, Marco Canini, Panos Kalnis
- 170-** ML2129: Unsupervised Deep Learning via Affinity Diffusion  
Jiabo Huang, Qi Dong, Shaogang Gong, Xiatian Zhu
- 171-** ML2138: Deep Domain-Adversarial Image Generation for Domain Generalisation  
Kaiyang Zhou, Yongxin Yang, Timothy Hospedales, Tao Xiang
- 172-** ML2159: Uncertainty-Aware Action Advising for Deep Reinforcement Learning Agents  
Felipe Leno Da Silva, Pablo Hernandez-Leal, Bilal Kartal, Matthew E. Taylor
- 173-** ML2425: Estimating Stochastic Linear Combination of Non-Linear Regressions  
Di Wang, Xiangyu Guo, Chaowen Guan, Shi Li, Jinhui Xu
- 174-** ML2455: Deterministic Value-Policy Gradients  
Qingpeng Cai, Ling Pan, Pingzhong Tang
- 175-** ML2461: How Should an Agent Practice?  
Janarthanan Rajendran, Richard Lewis, Vivek Veeriah, Honglak Lee, Satinder Singh
- 176-** ML2462: Suspicion-Free Adversarial Attacks on Clustering Algorithms  
Anshuman Chhabra, Abhishek Roy, Prasant Mohapatra
- 177-** ML2485: LS-Tree: Model Interpretation When the Data Are Linguistic  
Jianbo Chen, Michael Jordan
- 178-** ML2489: ML-LOO: Detecting Adversarial Examples with Feature Attribution  
Puyudi Yang, Jianbo Chen, Cho-Jui Hsieh, Jane-Ling Wang, Michael I. Jordan
- 179-** ML2533: Transparent Classification with Multilayer Logical Perceptrons and Random Binarization  
Zhuo Wang, Wei Zhang, Ning Liu, Jianyong Wang
- 180-** ML2584: Improved Subsampled Randomized Hadamard Transform for Linear SVM  
Zijian Lei, Liang Lan
- 181-** ML2599: Dynamic Network Pruning with Interpretable Layerwise Channel Selection  
Yulong Wang, Xiaolu Zhang, Xiaolin Hu, Bo Zhang, Hang Su
- 182-** ML2616: SetRank: A Setwise Bayesian Approach for Collaborative Ranking from Implicit Feedback  
Chao Wang, Hengshu Zhu, Chen Zhu, Chuan Qin, Hui Xiong
- 183-** ML2669: Semantics-Aligned Representation Learning for Person Re-Identification  
Xin Jin, Cuiling Lan, Wenjun Zeng, Guoqiang Wei, Zhibo Chen
- 184-** ML2711: Crowdfunding Dynamics Tracking: A Reinforcement Learning Approach  
Jun Wang, Hefu Zhang, Qi Liu, Zhen Pan, Hanqing Tao
- 185-** ML2718: Meta-Learning for Generalized Zero-Shot Learning  
Vinay Kumar Verma, Dhanajit Brahma, Piyush Rai
- 186-** ML2755: SNEQ: Semi-Supervised Attributed Network Embedding with Attention-Based Quantisation  
Tao He, Lianli Gao, Jingkuan Song, Xin Wang, Kejie Huang, Yuan-Fang Li
- 187-** ML2775: Reasoning on Knowledge Graphs with Debate Dynamics  
Marcel Hildebrandt, Jorge Andres Quintero Serna, Yunpu Ma, Martin Ringsquandl, Mitchell Joblin, Volker Tresp
- 188-** ML2776: Domain Conditioned Adaptation Network  
Shuang Li, Chi Harold Liu, Qiuxia Lin, Binhui Xie, Zhengming Ding, Gao Huang, Jian Tang
- 189-** ML2778: End-to-End Thorough Body Perception for Person Search  
Kun Tian, Houjing Huang, Yun Ye, Shiyu Li, Jinbin Lin, Guan Huang
- 190-** ML2804: High Performance Depthwise and Pointwise Convolutions on Mobile Devices  
Pengfei Zhang, Eric Lo, Baotong Lu
- 191-** ML2899: Regional Tree Regularization for Interpretability in Deep Neural Networks  
Mike Wu, Sonali Parbhoo, Michael C. Hughes, Ryan Kindle, Leo Celi, Maurizio Zazzi, Volker Roth, Finale Doshi-Velez
- 192-** ML2930: Co-Occurrence Estimation from Aggregated Data with Auxiliary Information  
Tomoharu Iwata, Naoki Marumo

- 193-** ML2977: Topic Modeling on Document Networks with Adjacent-Encoder  
Ce Zhang, Hady W. Lauw
- 194-** ML2994: FlowScope: Spotting Money Laundering Based on Graphs  
Xiangfeng Li, Shenghua Liu, Zifeng Li, Xiaotian Han, Chuan Shi, Bryan Hooi, He Huang, Xueqi Cheng
- 195-** ML3037: Absum: Simple Regularization Method for Reducing Structural Sensitivity of Convolutional Neural Networks  
Sekitoshi Kanai, Yasutoshi Ida, Yasuhiro Fujiwara, Masanori Yamada, Shuichi Adachi
- 196-** ML3081: Safe Sample Screening for Robust Support Vector Machine  
Zhou Zhai, Bin Gu, Xiang Li, Heng Huang
- 197-** ML3091: Off-Policy Evaluation in Partially Observable Environments  
Guy Tennenholtz, Shie Mannor, Uri Shalit
- 198-** ML3247: Measuring and Relieving the Over-Smoothing Problem for Graph Neural Networks from the Topological View  
Deli Chen, Yankai Lin, Wei Li, Peng Li, Jie Zhou, Xu Sun
- 199-** ML3339: Maximum Margin Multi-Dimensional Classification  
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Nupoor Gandhi, Alex Morales, Sally Man-Pui Chan, Dolores Albarracin, ChengXiang Zhai

**524-** SA640: Determining the Possibility of Transfer Learning in Deep Reinforcement Learning Using Grad-CAM  
Ho-Taek Joo, Kyung-Joong Kim

**525-** SA642: ERLP: Ensembles of Reinforcement Learning Policies  
Rohan Saphal, Balaraman Ravindran, Dheevatsa Mudigere, Sasikanth Avancha, Bharat Kaul

**526-** SA650: Meta-Learning on Graph with Curvature-Based Analysis  
Tae Hong Moon, Sungsu Lim

**527-** SA656: CORAL-DMOEA: Correlation Alignment-Based Information Transfer for Dynamic Multi-Objective Optimization  
Li Chen, Hua Xu

**528-** SA659: Rception: Wide and Deep Interaction Networks for Machine Reading Comprehension  
Xuanyu Zhang, Zhichun Wang

**529-** SA665: I Know Where You Are Coming From: On the Impact of Social Media Sources on AI Model Performance  
Qi Yang, Aleksandr Farseev, Andrey Filchenkov

**530-** SA668: Robust Multi-View Representation Learning  
Sibi Venkatesan, James K. Miller, Artur Dubrawski

**531-** SA671: Does Speech Enhancement of Publicly Available Data Help Build Robust Speech Recognition Systems?  
Bhavya Ghai, Buvana Ramanan, Klaus Mueller

**532-** SA676: SpotFake+: A Multimodal Framework for Fake News Detection via Transfer Learning  
Shivangi Singhal, Anubha Kabra, Mohit Sharma, Rajiv Ratn Shah, Tanmoy Chakraborty, Ponnurangam Kumaraguru

**533-** SA679: Multidimensional Analysis of Trust in News Articles  
Avneet Kaur, Maitree Leekha, Utkarsh Chawla, Ayush Agarwal, Mudit Saxena, Nishtha Madaan, Kalapriya Kannan and Sameep Mehta

**534-** SA681: Suicide Risk Assessment via Temporal Psycholinguistic Modeling  
Puneet Mathur, Ramit Sawhney, Rajiv Ratn Shah

**535-** SA682: Task Scoping for Efficient Planning in Open Worlds  
Nishanth Kumar, Michael Fishman, Natasha Danas, Stefanie Tellex, Michael Littman, George Konidaris

**536-** SA684: Bayesian Optimisation for Premise Selection in Automated Theorem Proving  
Agnieszka Slowik, Chaitanya Mangla, Mateja Jamnik, Sean B. Holden, Lawrence C. Paulson

**537-** SA685: Analysis of Parliamentary Debate Transcripts Using Community-Based Graphical Approaches  
Anjali Bhavan, Mohit Sharma, Ramit Sawhney, Rajiv Ratn Shah

**538-** SA688: Literature Mining for Incorporating Inductive Bias in Biomedical Prediction Tasks  
Qizhen Zhang, Audrey Durand, Joelle Pineau

**539-** SA689: A Bias Trick for Centered Robust Principal Component Analysis  
Baokun He, Guihong Wan, Haim Schweitzer

## Demos

**1-** DEMO541: Doc2Dial: A Framework for Dialogue Composition Grounded in Documents  
Song Feng, Kshitij Fadnis, Q. Vera Liao, Luis A. Lastras

**2-** DEMO556: TraceHub - A Platform to Bridge the Gap between State-of-the-Art Time-Series Analytics and Datasets  
Shubham Agarwal, Christian Muise, Mayank Agarwal, Sohini Upadhyay, Zilu Tang, Zhongshen Zeng, Yasaman Khazaeni

**3-** DEMO565: MatchU: An Interactive Matching Platform  
James Ferris, Hadi Hosseini

**4-** DEMO566: DICR: AI Assisted, Adaptive Platform for Contract Review  
Dan G. Tecuci, Ravi Palla, Hamid R. Motahari Nezhad, Nishchal Ahuja, Alex Monteiro, Tigran Ishkhanov, Nigel Duffy

**5-** DEMO573: Data-Driven Ranking and Visualization of Products by Competitiveness  
Sheema Usmani, Mariana Bernagozzi, Yufeng Huang, Michelle Morales, Amir Sabet Sarvestani, Biplav Srivastava

**6-** DEMO583: LearnIt: On-Demand Rapid Customization for Event-Event Relation Extraction  
Bonan Min, Manaj Srivastava, Haoling Qiu, Prasannakumar Muthukumar, Joshua Fasching

**7-** DEMO646: Embedding High-Level Knowledge into DQNs to Learn Faster and More Safely  
Zihang Gao, Fangzhen Lin, Yi Zhou, Hao Zhang, Kaishun Wu, Haodi Zhang

**8-** DEMO677: Plan2Dance: Planning Based Choreographing from Music  
Yuechang Liu, Dongbo Xie, Hankz Hankui Zhuo, Liqian Lai