

AAAI-14 Technical Conference Schedule

Monday, July 28

6:00 – 7:00 PM AAAI/IAAI Opening Reception
Hall 200C

7:30 – 8:30 PM
AAAI / IAAI Joint Invited Talk: Siri: Back to the Future
Adam Cheyer
Introduction by David Gunning
Hall 200A

Tuesday, July 29

8:30 AM – 9:00 AM

Hall 200A
AAAI-14 / IAAI-14 Opening Ceremony

AAAI Welcome and Award Presentations
Carla Brodley and Peter Stone, AAAI-14 Program Cochairs

IAAI Welcome and Award Presentations
David Stracuzzi, IAAI-14 Conference Chair; David Gunning, IAAI-14 Program Cochair; and David Leake, AI Magazine Editor-in-Chief

IJCAI-JAIR Best Paper Award Presentations
Craig Boutilier, Editor-in-Chief, JAIR

AAAI Special Awards: Fellows Announcement, Senior Member Recognition, AAAI Classic Paper Award, Distinguished Service Award
Henry Kautz, AAAI Past President and Awards Committee Chair; Manuela Veloso, AAAI President; and Thomas Dietterich, AAAI President-Elect

9:00 – 10:00 AM Parallel Technical Sessions

301A
Technical Session: NOVEL MACHINE LEARNING ALGORITHMS

191: Representation Acquisition for Task-Level Planning
George Konidaris, Leslie Pack Kaelbling, Tomas Lozano-Perez

908: Imitation Learning with Demonstrations and Shaping Rewards
Kshitij Judah, Alan Fern, Prasad Tadepalli, Robby Goetschalckx

912: Spectral Thompson Sampling
Tomáš Kocák, Michal Valko, Remi Munos, Shipra Agrawal

Best Paper Nominee

176: Manifold Learning for Jointly Modeling Topic and Visualization
Tuan M. V. Le, Hady W. Lauw

301B

Technical Session: KNOWLEDGE REPRESENTATION AND REASONING

172: The Complexity of Reasoning with FODD and GFODD
Benjamin J. Hescott, Roni Khardon

524: Querying Inconsistent Description Logic Knowledge Bases under Preferred Repair Semantics
Meghyn Bienvenu, Camille Bourgaux, François Goasdoué

611: The Computational Complexity of Structure-Based Causality
Gadi Aleksandrowicz, Hana Chockler, Joseph Y. Halpern, Alexander Ivrii

1178: A Knowledge Compilation Map for Ordered Real-Valued Decision Diagrams
Helene Fargier, Pierre Marquis, Alexandre Niveau, Nicolas Schmidt

302A

Technical Session: SEARCH AND CONSTRAINT SATISFACTION

758: Boosting SBDS for Partial Symmetry Breaking in Constraint Programming
Jimmy H. M. Lee, Zichen Zhu

797: Linear-Time Filtering Algorithms for the Disjunctive Constraint
Hamed Fahimi, Claude-Guy Quimper

1144: Backdoors into Heterogeneous Classes of SAT and CSP
Serge Gaspers, Neeldhara Misra, Sebastian Ordyniak, Stefan Szeider, Stanislav Živný

1281: A Support-Based Algorithm for the Bi-Objective Pareto Constraint
Renaud Hartert, Pierre Schaus

302B

Technical Session: NLP AND TEXT MINING

47: Lifetime Lexical Variation in Social Media
Liao Lizi, Jing Jiang, Ying Ding, Heyan Huang, Ee-Peng Lim

649: Extracting Keyphrases from Research Papers Using Citation Networks
Sujatha Das Gollapalli, Cornelia Caragea

1361: Detecting Information-Dense Texts In Multiple News Domains
Yinfei Yang, Ani Nenkova

1714: Chinese Overt Pronoun Resolution: A Bilingual Approach
Chen Chen, Vincent Ng

303A

Technical Session: COMPUTATIONAL SUSTAINABILITY AND AI

Best Paper Nominee

632: Placement of Loading Stations for Electric Vehicles: No Detours Necessary!
Stefan Funke, André Nusser, Sabine Storandt

148: A Latent Variable Model for Discovering Bird Species Commonly Misidentified
by Citizen Scientists
Jun Yu, Rebecca A. Hutchinson, Weng-Keen Wong

197: Intelligent System for Urban Emergency Management During Large-Scale
Disaster
Xuan Song, Quanshi Zhang, Yoshihide Sekimoto, Ryosuke Shibasaki

609: Contextually Supervised Source Separation with Application to Energy
Disaggregation
Matt Wytoczek, J. Zico Kolter

303B

Technical Session: GAME THEORY AND ECONOMIC PARADIGMS

546: A Control Dichotomy for Pure Scoring Rules
Edith Hemaspaandra, Lane A. Hemaspaandra, Henning Schnoor

864: False-Name Bidding and Economic Efficiency in Combinatorial Auctions
Colleen Alkalay-Houlihan, Adrian Vetta

1083: Item Bidding for Combinatorial Public Projects
Evangelos Markakis, Orestis Telelis

1599: Betting Strategies, Market Selection, and the Wisdom of Crowds
Willemien Kets, David M. Pennock, Rajiv Sethi, Nisarg Shah

Hall 200A

AAAI 2014 Robert S. Englemore Award Lecture

From Virtual Museums to Peacebuilding: Creating and Using Linked Knowledge

Craig A. Knoblock (University of Southern California)

Introduction by David Leake

10:00 - 10:20 AM Break

10:20 – 11:35 AM Parallel Technical Sessions

301A

Technical Session: NOVEL MACHINE LEARNING ALGORITHMS

898: Wormhole Hamiltonian Monte Carlo
Shiwei Lan, Jeffrey Streets, Babak Shahbaba

844: Learning the Structure of Probabilistic Graphical Models with an Extended Cascading Indian Buffet Process
Patrick Dallaire, Philippe Giguère, Brahim Chaib-Draa

471: Small-Variance Asymptotics for Dirichlet Process Mixtures of SVMs
Yining Wang, Jun Zhu

476: Using the Matrix Ridge Approximation to Speedup Determinantal Point Processes Sampling Algorithms
Shusen Wang, Chao Zhang, Hui Qian, Zhihua Zhang

1123: Large-Scale Optimistic Adaptive Submodularity
Victor Gabillon, Branislav Kveton, Zheng Wen, Brian Eriksson, S. Muthukrishnan

301B

Technical Session: PLANNING AND SCHEDULING

924: Parametrized Families of Hard Planning Problems from Phase Transitions
Eleanor G. Rieffel, Davide Venturelli, Minh Do, Itay Hen, Jeremy Frank

1098: Backdoors to Planning
Martin Kronegger, Sebastian Ordyniak, Andreas Pfandler

1350: Scheduling for Transfers in Pickup and Delivery Problems with Very Large Neighborhood Search
Brian Coltin, Manuela Veloso

1643: A Scheduler for Actions with Iterated Durations
James Paterson, Eric Timmons, Brian C. Williams

Best Paper Nominee

413: Generalized Label Reduction for Merge-and-Shrink Heuristics
Silvan Sievers, Martin Wehrle, Malte Helmert

302A

Technical Session: GAME THEORY AND MULTIAGENT SYSTEMS

725: Congestion Games for V2G-Enabled EV Charging
Benny Lutati, Vadim Levit, Tal Grinshpoun, Amnon Meisels

796: A Game-Theoretic Analysis of Catalog Optimization
Joel Oren, Nina Narodytska, Craig Boutilier

916: Robust Winners and Winner Determination Policies under Candidate Uncertainty
Craig Boutilier, Jérôme Lang, Joel Oren, Hector Palacios

1147: Theory of Cooperation in Complex Social Networks
Bijan Ranjbar-Sahraei, Haitham Bou Ammar, Daan Bloembergen, Karl Tuyls, Gerhard Weiss

1184: Prices Matter for the Parameterized Complexity of Shift Bribery
Robert Brederbeck, Jiehua Chen, Piotr Faliszewski, André Nichterlein, Rolf Niedermeier

302B

Technical Session: AI AND THE WEB

1026: Who Also Likes It? Generating the Most Persuasive Social Explanations in Recommender Systems
Beidou Wang, Martin Ester, Jiajun Bu, Deng Cai

668: Leveraging Decomposed Trust in Probabilistic Matrix Factorization for Effective Recommendation
Hui Fang, Yang Bao, Jie Zhang

488: TopicMF: Simultaneously Exploiting Ratings and Reviews for Recommendation
Yang Bao, Hui Fang, Jie Zhang

1764: Combining Heterogenous Social and Geographical Information for Event Recommendation
Zhi Qiao, Peng Zhang, Yanan Cao, Chuan Zhou, Li Guo, Bingxing Fang

362: Parallel Materialisation of Datalog Programs in Centralised, Main-Memory RDF Systems
Boris Motik, Yavor Nenov, Robert Piro, Ian Horrocks, Dan Olteanu

303A

Technical Session: HUMAN-COMPUTATION AND CROWD SOURCING

1121: Acquiring Commonsense Knowledge for Sentiment Analysis through Human Computation

Marina Boia, Claudiu Cristian Musat, Boi Faltings

1475: Signals in the Silence: Models of Implicit Feedback in a Recommender System for Crowdsourcing

Christopher H. Lin, Ece Kamar, Eric Horvitz

1343: Online and Stochastic Learning with a Human Cognitive Bias

Hidekazu Oiwa, Hiroshi Nakagawa

1528: Anytime Active Learning

Maria E. Ramirez-Loaiza, Aron Culotta, Mustafa Bilgic

731: Generating Content for Scenario-Based Serious-Games Using CrowdSourcing

Sigal Sina, Avi Rosenfeld, Sarit Kraus

303B

Technical Session: REASONING UNDER UNCERTAINTY

Best Paper Nominee

381: Recovering from Selection Bias in Causal and Statistical Inference

Elias Bareinboim, Jin Tian, Judea Pearl

Best Paper Nominee

1431: Tractability through Exchangeability: A New Perspective on Efficient Probabilistic Inference

Mathias Niepert, Guy Van den Broeck

753: Lifting Relational MAP-LPs Using Cluster Signatures

Udi Apsel, Kristian Kersting, Martin Mladenov

1297: Approximate Lifting Techniques for Belief Propagation

Parag Singla, Aniruddh Nath, Pedro Domingos

1175: Explanation-Based Approximate Weighted Model Counting for Probabilistic Logics

Joris Renkens, Angelika Kimmig, Guy Van den Broeck, Luc De Raedt

11:35 – 11:50 AM What's Hot / 2014 Classic Paper Award Talk

301A

What's Hot Session: ICAPS

What's Hot: Challenges in Planning

Rao Khambampati

301B

What's Hot Session: AAMAS

What's Hot: What's Hot in Autonomous Agents

Noa Agmon

303A

Classic Paper Award Session

2014 Classic Paper Award: Syskill & Webert: Identifying Interesting Web Sites

Michael J. Pazzani, Jack Muramatsu and Daniel Billsus

303B

What's Hot Session: CogSci

What's Hot: What's Hot in Cognitive Science

Matthias Scheutz

304A/B

10:20 - 11:50 AM IAAI Paper Session: Deployed Applications

Session Chair: Ted Senator

Deployed: Evaluation and Deployment of a People-to-People Recommender in Online Dating

A. Krzywicki, W. Wobcke, Y. S. Kim, X. Cai, M. Bain, P. Compton, A. Mahidadia

Deployed: The Quest Draft: An Automated Course Allocation Algorithm

Richard Hoshino, Caleb Raible-Clark

Deployed: Think: Inferring Cognitive Status from Subtle Behaviors

Randall Davis, David J. Libon, Rhoda Au, David Pitman, Dana L. Penney

11:50 AM - 1:00 PM Lunch

Hall 200A

1:00 - 2:00 PM

AAAI-14 Invited Talk: Behavioral Network Science

Michael Kearns (University of Pennsylvania)

Introduction by Peter Stone

Hall 200A

2:00 - 2:30 PM Plenary Technical Session 1

716: Can Agent Development Affect Developer's Strategy?

Avshalom Elmalech, David Sarne, Noa Agmon

400: Active Learning with Model Selection
Alnur Ali, Rich Caruana, Ashish Kapoor

403: Sketch Recognition with Natural Correction and Editing
Jie Wu, Changhu Wang, Liqing Zhang, Yong Rui

1621: Designing Fast Absorbing Markov Chains
Stefano Ermon, Carla P. Gomes, Ashish Sabharwal, Bart Selman

1189: On Hair Recognition in the Wild by Machine
Joseph Roth, Xiaoming Liu

580: How Do Your Friends on Social Media Disclose Your Emotions?
Yang Yang, Jia Jia, Shumei Zhang, Boya Wu, Qicong Chen, Juanzi Li, Chunxiao Xing, Jie Tang

736: Automatic Construction and Natural-Language Description of Nonparametric Regression Models
James Robert Lloyd, David Duvenaud, Roger Grosse, Joshua B. Tenenbaum, Zoubin Ghahramani

946: Confident Reasoning on Raven's Progressive Matrices Tests
Keith McGregor, Ashok Goel

684: Learning Deep Representations for Graph Clustering
Fei Tian, Bin Gao, Qing Cui, Enhong Chen, Tie-Yan Liu

742: Capturing Difficulty Expressions in Student Online Q&A Discussions
Jaebong Yoo, Jihie Kim

331: Quality-Based Learning for Web Data Classification
Ou Wu, Ruiguang Hu, Xue Mao, Weiming Hu

1082: A Region-Based Model for Estimating Urban Air Pollution
Arnaud Jutzeler, Jason Jingshi Li, Boi Faltings

2:35 – 3:35 PM Parallel Technical Sessions

301A

Technical Session: ROBOTICS

459: Robust Visual Robot Localization across Seasons Using Network Flows
Tayyab Naseer, Luciano Spinello, Wolfram Burgard, Cyrill Stachniss

887: A Framework for Task Planning in Heterogeneous Multi Robot Systems Based on Robot Capabilities

Jennifer Buehler, Maurice Pagnucco

1381: Schedule-Based Robotic Search for Multiple Residents in a Retirement Home Environment

Markus Schwenk, Tiago Vaquero, Goldie Nejat

1503: GP-Localize: Persistent Mobile Robot Localization Using Online Sparse Gaussian Process Observation Model

Nuo Xu, Kian Hsiang Low, Jie Chen, Keng Kiat Lim, Etkin Baris Özgül

301B

Technical Session: KNOWLEDGE REPRESENTATION AND REASONING

732: A Tractable Approach to ABox Abduction over Description Logic Ontologies

Jianfeng Du, Kewen Wang, Yi-Dong Shen

789: Reasoning on LTL on Finite Traces: Insensitivity to Infiniteness

Giuseppe De Giacomo, Riccardo De Masellis, Marco Montali

1102: Datalog Rewritability of Disjunctive Datalog Programs and its Applications to Ontology Reasoning

Mark Kaminski, Yavor Nenov, Bernardo Cuenca Grau

1190: Capturing Relational Schemas and Functional Dependencies in RDFS

Diego Calvanese, Wolfgang Fischl, Reinhard Pichler, Emanuel Sallinger, Mantas Simkus

302A

Technical Session: VISION

162: Semantic Graph Construction for Weakly-Supervised Image Parsing

Wenxuan Xie, Yuxin Peng, Jianguo Xiao

369: Efficient Object Detection via Adaptive Online Selection of Sensor-Array Elements

Matthai Philipose

618: Grounding Acoustic Echoes in Single View Geometry Estimation

Wajahat Hussain, Javier Civera, Luis Montano

658: Sub-Selective Quantization for Large-Scale Image Search

Yeqing Li, Chen Chen, Wei Liu, Junzhou Huang

302B

Technical Session: COGNITIVE SYSTEMS

850: Learning Compositional Sparse Models of Bimodal Percepts
Suren Kumar, Vikas Dhiman, Jason J. Corso

857: Learning Goal-Oriented Hierarchical Tasks from Situated Interactive Instruction
Shiwali Mohan, John E. Laird

1463: Social Planning: Achieving Goals by Altering Others' Mental States
Chris Pearce, Ben Meadows, Pat Langley, Mike Barley

1513: Using Narrative Function to Extract Qualitative Information from Natural Language Texts
Clifton McFate, Kenneth Forbus, Thomas Hinrichs

303A

Technical Session: MACHINE LEARNING APPLICATIONS

146: Identifying Differences in Physician Communication Styles with a Log-Linear Transition Component Model

Byron C. Wallace, Issa J. Dahabreh, Thomas A. Trikalinos, M. Barton Laws, Ira Wilson, Eugene Charniak

727: Accurate Household Occupant Behavior Modeling Based on Data Mining Techniques

Márcia Baptista, Anjie Fang, Helmut Prendinger, Rui Prada, Yohei Yamaguchi

919: Learning Latent Engagement Patterns of Students in Online Courses

Arti Ramesh, Dan Goldwasser, Bert Huang, Hal Daumé III, Lise Getoor

1186: Decomposing Activities of Daily Living to Discover Routine Clusters

Onur Yürüten, Jiyong Zhang, Pearl Pu

303B

Technical Session: GAME THEORY AND ECONOMIC PARADIGMS / MULTIAGENT SYSTEMS

1113: Increasing VCG Revenue by Decreasing the Quality of Items

Mingyu Guo, Argyrios Deligkas, Rahul Savani

1242: Incentives for Truthful Information Elicitation of Continuous Signals

Goran Radanovic, Boi Faltings

1244: Equilibria in Epidemic Containment Games

Sudip Saha, Abhijin Adiga, Anil Kumar S. Vullikanti

304A/B

2:00 – 3:35 PM IAAI Paper Session: Resource Scheduling

Session Chair: Jana Koehler

Deployed: Engineering Works Scheduling for Hong Kong's Rail Network
Andy Hon Wai Chun, Ted Yiu Tat Suen

Emerging: A Schedule Optimization Tool for Destructive and Non-Destructive Vehicle Tests
Jeremy Ludwig, Annaka Kalton, Robert Richards, Brian Bautsch, Craig Markusic, J. Schumacher

Emerging: STREETS: Game-Theoretic Traffic Patrolling with Exploration and Exploitation
Matthew Brown, Sandhya Saisubramanian, Pradeep Varakantham, Milind Tambe

Emerging: AI-MIX: Using Automated Planning to Steer Human Workers towards Better Crowdsourced Plans
Lydia Manikonda, Tathagata Chakraborti, Sushovan De, Kartik Talamadupula, Subbarao Kambhampati

3:35 – 4:00 PM Break

Hall 200A

4:00 – 5:00 PM

AAAI-14 Invited Talk

Cynthia Breazeal (Massachusetts Institute of Technology)

Introduction by Carla Brodley

Hall 200A

5:00 – 5:30 PM Plenary Technical Session 2

452: Solving Imperfect Information Games Using Decomposition
Neil Burch, Michael Johanson, Michael Bowling

872: Exploiting Competition Relationship for Robust Visual Recognition
Liang Du, Haibin Ling

22: Source Free Transfer Learning for Text Classification
Zhongqi Lu, Yin Zhu, Sinno Jialin Pan, Evan Wei Xiang, Yujing Wang, Qiang Yang

69: Locality Preserving Hashing
Kang Zhao, Hongtao Lu, Jincheng Mei

113: R2: An Efficient MCMC Sampler for Probabilistic Programs

Aditya V. Nori, Chung-Kil Hur, Sriram K. Rajamani, Selva Samuel

266: Modeling and Predicting Popularity Dynamics via Reinforced Poisson Process
Huawei Shen, Dashun Wang, Chaoming Song, Albert-László Barabási

106: Tailoring Local Search for Partial MaxSAT
Shaowei Cai, Chuan Luo, John Thornton, Kaile Su

670: Multi-Instance Learning with Distribution Change
Wei-Jia Zhang, Zhi-Hua Zhou

343: A Strategy-Proof Online Auction with Time Discounting Values
Fan Wu, Junming Liu, Zhenzhe Zheng, Guihai Chen

367: Non-Linear Label Ranking for Large-Scale Prediction of Long-Term User Interests
Nemanja Djuric, Mihajlo Grbovic, Vladan Radosavljevic, Narayan Bhamidipati, Slobodan Vucetic

386: Improving Semi-Supervised Target Alignment via Label-Aware Base Kernels
Qiaojun Wang, Kai Zhang, Guofei Jiang, Ivan Marsic

1063: Combining Multiple Correlated Reward and Shaping Signals by Measuring Confidence
Tim Brys, Ann Nowé, Daniel Kudenko, Matthew E. Taylor

5:30 – 7:00 PM

Poster Session 1 and Reception

(Includes all technical, student, EAAI, and Poker posters)

Hall 200B/C

Scheduled AAAI Technical Papers

All technical papers will be posted throughout the conference. Posters will be assigned to a specific board, and will be grouped by subject area. A guide will be available onsite. Papers presented in plenary sessions or in poster format only are scheduled at specific times. Each poster session is divided into two time periods. Poster Session 1 includes papers in Sections A and B, which are listed below:

* Plenary talk poster

Session A: 5:30 – 6:15 PM

AI and the Web (AIW)

22: Source Free Transfer Learning for Text Classification

Zhongqi Lu, Yin Zhu, Sinno Jialin Pan, Evan Wei Xiang, Yujing Wang, Qiang Yang

331: Quality-Based Learning for Web Data Classification
Ou Wu, Ruiguang Hu, Xue Mao, Weiming Hu

742: Capturing Difficulty Expressions in Student Online Q&A Discussions
Jaebong Yoo, Jihie Kim

Applications (APP)

266: Modeling and Predicting Popularity Dynamics via Reinforced Poisson Processes
Huawei Shen, Dashun Wang, Chaoming Song, Albert-László Barabási

580: How Do Your Friends on Social Media Disclose Your Emotions?
Yang Yang, Jia Jia, Shumei Zhang, Boya Wu, Qicong Chen, Juanzi Li, Chunxiao Xing, Jie Tang

Cognitive Systems (CS)

946: Confident Reasoning on Raven's Progressive Matrices Tests
Keith McGreggor, Ashok Goel

Computational Sustainability and AI (CSAI)

1082: A Region-Based Model for Estimating Urban Air Pollution
Arnaud Jutzeler, Jason Jingshi Li, Boi Faltings

Game Theory and Economic Paradigms (GTEP)

341: Extending Tournament Solutions
Felix Brandt, Markus Brill, Paul Harrenstein

452: Solving Imperfect Information Games Using Decomposition
Neil Burch, Michael Johanson, Michael Bowling

343: A Strategy-Proof Online Auction with Time Discounting Values
Fan Wu, Junming Liu, Zhenzhe Zheng, Guihai Chen

Heuristic Search and Optimization (HSO)

1621: Designing Fast Absorbing Markov Chains
Stefano Ermon, Carla P. Gomes, Ashish Sabharwal, Bart Selman

Humans and AI (HAI)

716: Can Agent Development Affect Developer's Strategy?
Avshalom Elmalech, David Sarne, Noa Agmon

403: Sketch Recognition with Natural Correction and Editing
Jie Wu, Changhu Wang, Liqing Zhang, Yong Rui

Knowledge Representation and Reasoning (KRR)

1234: Exploring the Boundaries of Decidable Verification of Non-Terminating Golog

Programs

Jens Claßen, Martin Liebenberg, Gerhard Lakemeyer, Benjamin Zarrieß

569: Elementary Loops Revisited

Jianmin Ji, Hai Wan, Peng Xiao, Ziwei Huo, Zhanhao Xiao

Machine Learning Applications (MLA)

736: Automatic Construction and Natural-Language Description of Nonparametric Regression Models

James Robert Lloyd, David Duvenaud, Roger Grosse, Joshua B. Tenenbaum, Zoubin Ghahramani

684: Learning Deep Representations for Graph Clustering

Fei Tian, Bin Gao, Qing Cui, Enhong Chen, Tie-Yan Liu

NLP and Knowledge Representation (NLPKR)

585: Joint Morphological Generation and Syntactic Linearization

Linfeng Song, Yue Zhang, Kai Song, Qun Liu

Novel Machine Learning Algorithms (NMLA)

400: Active Learning with Model Selection

Alnur Ali, Rich Caruana, Ashish Kapoor

1063: Combining Multiple Correlated Reward and Shaping Signals by Measuring Confidence

Tim Brys, Ann Nowé, Daniel Kudenko, Matthew E. Taylor

367: Non-Linear Label Ranking for Large-Scale Prediction of Long-Term User Interests

Nemanja Djuric, Mihajlo Grbovic, Vladan Radosavljevic, Narayan Bhamidipati, Slobodan Vucetic

386: Improving Semi-Supervised Target Alignment via Label-Aware Base Kernels

Qiaojun Wang, Kai Zhang, Guofei Jiang, Ivan Marsic

670: Multi-Instance Learning with Distribution Change

Wei-Jia Zhang, Zhi-Hua Zhou

Planning and Scheduling (PS)

762: Oversubscription Planning: Complexity and Compilability

Meysam Aghighi, Peter Jonsson

7: Solving the Traveling Tournament Problem by Packing Three-Vertex Paths

Marc Goerigk, Richard Hoshino, Ken-ichi Kawarabayashi, Stephan Westphal

Reasoning under Uncertainty (RU)

113: R2: An Efficient MCMC Sampler for Probabilistic Programs
Aditya V. Nori, Chung-Kil Hur, Sriram K. Rajamani, Selva Samuel

Search and Constraint Satisfaction (SCS)

443: MaxSAT by Improved Instance-Specific Algorithm Configuration
Carlos Ansótegui, Yuri Malitsky, Meinolf Sellmann

106: Tailoring Local Search for Partial MaxSAT
Shaowei Cai, Chuan Luo, John Thornton, Kaile Su

371: An Experimentally Efficient Method for (MSS,CoMSS) Partitioning
Éric Grégoire, Jean-Marie Lagniez, Bertrand Mazure

Vision (VIS)

872: Exploiting Competition Relationship for Robust Visual Recognition
Liang Du, Haibin Ling

1189: On Hair Recognition in the Wild by Machine
Joseph Roth, Xiaoming Liu

69: Locality Preserving Hashing
Kang Zhao, Hongtao Lu, Jincheng Mei

Session B: 6:15 – 7:00 PM

AI and the Web (AIW)

483: ARIA: Asymmetry Resistant Instance Alignment
Sanghoon Lee, Seung-won Hwang

712: Cross-Lingual Knowledge Validation Based Taxonomy Derivation from
Heterogeneous Online Wikis
Zhigang Wang, Juanzi Li, Shuangjie Li, Mingyang Li, Jie Tang, Kuo Zhang, Kun Zhang

133: Learning Temporal Dynamics of Behavior Propagation in Social Networks
Jun Zhang, Chaokun Wang, Jianmin Wang

Cognitive Modeling (CM)

1292: An Agent-Based Model Studying the Acquisition of a Language System of
Logical Constructions
Josefina Sierra-Santibáñez

Game Playing and Interactive Entertainment (GPIE)

838: Approximate Equilibrium and Incentivizing Social Coordination
Elliot Anshelevich, Shreyas Sekar

Game Theory and Economic Paradigms (GTEP)

212: On the Incompatibility of Efficiency and Strategyproofness in Randomized Social Choice

Haris Aziz, Florian Brandl, Felix Brandt

794: New Models for Competitive Contagion

Moez Draief, Hoda Heidari, Michael Kearns

1060: Mechanism Design for Mobile Geo-Location Advertising

Nicola Gatti, Marco Rocco, Sofia Ceppi, Enrico H. Gerding

89: On the Structure of Synergies in Cooperative Games

Ariel D. Procaccia, Nisarg Shah, Max Lee Tucker

Heuristic Search and Optimization (HSO)

696: Sparse Learning for Stochastic Composite Optimization

Weizhong Zhang, Lijun Zhang, Yao Hu, Rong Jin, Deng Cai, Xiaofei He

Knowledge Representation and Reasoning (KRR)

1069: A Constructive Argumentation Framework

Souhila Kaci, Yakoub Salhi

1218: Abduction Framework for Repairing Incomplete *EL* Ontologies: Complexity Results and Algorithms

Fang Wei-Kleiner, Zlatan Dragisic, Patrick Lambrix

Machine Learning Applications (MLA)

1456: Online Portfolio Selection with Group Sparsity

Puja Das, Nicholas Johnson, Arindam Banerjee

606: On the Challenges of Physical Implementations of RBMs

Vincent Dumoulin, Ian J. Goodfellow, Aaron Courville, Yoshua Bengio

182: Ranking Tweets by Labeled and Collaboratively Selected Pairs with Transitive Closure

Shenghua Liu, Xueqi Cheng, Fangtao Li

1068: Privacy and Regression Model Preserved Learning

Jinfeng Yi, Jun Wang, Rong Jin

Multiagent Systems (MAS)

579: On Computing Optimal Strategies in Open List Proportional Representation: The Two Parties Case

Ning Ding, Fangzhen Lin

NLP and Machine Learning (NLPML)

417: Learning Word Representation Considering Proximity and Ambiguity

Lin Qiu, Yong Cao, Zaiqing Nie, Yong Yu, Yong Rui

Novel Machine Learning Algorithms (NMLA)

1716: Supervised Transfer Sparse Coding

Maruan Al-Shedivat, Jim Jing-Yan Wang, Majed Alzahrani, Jianhua Z. Huang, Xin Gao

27: Multilabel Classification with Label Correlations and Missing Labels

Wei Bi, James T. Kwok

351: Echo-State Conditional Restricted Boltzmann Machines

Sotirios P. Chatzis

612: Signed Laplacian Embedding for Supervised Dimension Reduction

Chen Gong, Dacheng Tao, Jie Yang, Keren Fu

1257: Adaptation-Guided Case Base Maintenance

Vahid Jalali, David Leake

1305: Non-Convex Feature Learning via $l_{p,\infty}$ Operator

Deguang Kong, Chris Ding

942: Learning Relative Similarity by Stochastic Dual Coordinate Ascent

Pengcheng Wu, Yi Ding, Peilin Zhao, Chunyan Miao, Steven C.H. Hoi

444: Large-Scale Supervised Multimodal Hashing with Semantic Correlation Maximization

Dongqing Zhang, Wu-Jun Li

Planning and Scheduling (PS)

1132: Saturated Path-Constrained MDP: Planning under Uncertainty and Deterministic Model-Checking Constraints

Jonathan Sprauel, Florent Teichteil-Königsbuch, Andrey Kolobov

275: Adding Local Exploration to Greedy Best-First Search in Satisficing Planning

Fan Xie, Martin Müller, Robert Holte

Reasoning under Uncertainty (RU)

1122: State Aggregation in Monte Carlo Tree Search

Jesse Hostetler, Alan Fern, Tom Dietterich

Search and Constraint Satisfaction (SCS)

1551: Non-Restarting SAT Solvers with Simple Preprocessing Can Efficiently Simulate Resolution

Paul Beame, Ashish Sabharwal

739: DJAO: A Communication-Constrained DCOP Algorithm that Combines Features

of ADOPT and Action-GDL
Yoonheui Kim, Victor Lesser

Vision (VIS)

1489: Learning to Recognize Novel Objects in One Shot through Human-Robot Interactions in Natural Language Dialogues
Evan Krause, Michael Zillich, Thomas Williams, Matthias Scheutz

7:30 – 10:30 PM

AAAI-14 Conference Fete

Le Theatre & Cabaret du Capitole de Quebec

Wednesday, July 30

8:30 – 9:15 AM What's Hot / Senior Member Sessions

301A

What's Hot Session: RL/ ECMLPKDD / RSS

Senior Member: What's Hot in Reinforcement Learning
Volodymyr Mnih

What's Hot: What's Hot in Machine Learning
Animashree Anandkumar

What's Hot: Challenges in Robotics
Stefanie Tellex

301B

Senior Member Session

Senior Member: Program Induction in the Real World
Stephen Muggleton

Senior Member: Implications of Algorithmic and High-Frequency Trading
Michael Wellman

Senior Member: Spectral Learning Methods for Natural Language Processing
Lyle Ungar

303A

What's Hot Session: ICWSM/SoCS/CogSci

What's Hot: What's Hot in Social Media
Eytan Adar

What's Hot: Challenges in Combinatorial Search
Nathan Sturtevant

What's Hot: Challenges in Cognitive Science
Vincent C. Mueller

303B
Senior Member Session

Senior Member: Advances in Developing Physical and Cognitive Surrogates for Remote Operations: The Mars Exploration Rovers as Collaboration Tools
William Clancey

Senior Member: Knowledge Compilation
Adnan Darwiche

Senior Member: From Programs to Program Spaces: Leveraging Machine Learning and Optimisation for Automated Algorithm Design
Holger Hoos

9:15 – 10:00 AM Parallel Technical Sessions

301A
Technical Session: NOVEL MACHINE LEARNING ALGORITHMS

4: Kernelized Bayesian Transfer Learning
Mehmet Gönen, Adam A. Margolin

320: Dropout Training for Support Vector Machines
Ning Chen, Jun Zhu, Jianfei Chen, Bo Zhang

352: ReLISH: Reliable Label Inference via Smoothness Hypothesis
Chen Gong, Dacheng Tao, Keren Fu, Jie Yang

301B
Technical Session: KNOWLEDGE REPRESENTATION AND REASONING / APPLICATIONS

895: Using Model-Based Diagnosis to Improve Software Testing
Tom Zamir, Roni Stern, Meir Kalech

906: Pay-As-You-Go OWL Query Answering Using a Triple Store
Yujiao Zhou, Yavor Nenov, Bernardo Cuenca Grau, Ian Horrocks

1119: The Most Uncreative Examinee: A First Step toward Wide Coverage Natural Language Math Problem Solving
Takuya Matsuzaki, Hidenao Iwane, Hirokazu Anai, Noriko Arai

302A

Technical Session: HEURISTIC SEARCH AND OPTIMIZATION

719: Exponential Deepening A* for Real-Time Agent-Centered Search
Guni Sharon, Ariel Felner, Nathan R. Sturtevant

963: Identifying Hierarchies for Fast Optimal Search
Tansel Uras, Sven Koenig

1548: Elimination Ordering in Lifted First-Order Probabilistic Inference
Seyed Mehran Kazemi, David Poole

303A

Technical Session: COGNITIVE MODELING

170: The Importance of Cognition and Affect for Artificially Intelligent Decision Makers
Celso M. de Melo, Jonathan Gratch, Peter J. Carnevale

1516: Efficient Codes for Inverse Dynamics during Walking
Leif Johnson, Dana H. Ballard

1693: Modeling Subjective Experience-Based Learning under Uncertainty and Frames
Hyung-il Ahn, Rosalind W. Picard

303B

Technical Session: GAME THEORY AND ECONOMIC PARADIGMS / GAME PLAYING

441: A Parameterized Complexity Analysis of Generalized CP-Nets
Martin Kronegger, Martin Lackner, Andreas Pfandler, Reinhard Pichler

776: Evolutionary Dynamics of Q-Learning over the Sequence Form
Fabio Panozzo, Nicola Gatti, Marcello Restelli

1055: Two Case Studies for Trading Multiple Indivisible Goods with Indifferences
Akihisa Sonoda, Etsushi Fujita, Taiki Todo, Makoto Yokoo

Hall 200A

9:00 – 10:00 AM

IAAI-14 Invited Talk: The Conversational User Interface

Ron Kaplan (Nuance Communications, Inc.)

Introduction by David Stracuzzi

10:00 - 10:20 AM Break

10:20 - 11:50 AM Parallel Technical Sessions

301A

Technical Session: NOVEL MACHINE LEARNING ALGORITHMS

568: Encoding Tree Sparsity in Multi-Task Learning: A Probabilistic Framework

Lei Han, Yu Zhang, Guojie Song, Kunqing Xie

783: Labeling Complicated Objects: Multi-View Multi-Instance Multi-Label Learning

Cam-Tu Nguyen, Xiaoliang Wang, Zhi-Hua Zhou

957: Cross-Domain Metric Learning Based on Information Theory

Hao Wang, Wei Wang, Chen Zhang, Fanjiang Xu

1282: *HC*-Search for Multi-Label Prediction: An Empirical Study

Janardhan Rao Doppa, Jun Yu, Chao Ma, Alan Fern, Prasad Tadepalli

1421: Learning Instance Concepts from Multiple-Instance Data with Bags as Distributions

Gary Doran, Soumya Ray

1598: Online Multi-Task Learning via Sparse Dictionary Optimization

Paul Ruvolo, Eric Eaton

301B

Technical Session: NLP AND KNOWLEDGE REPRESENTATION / NLP AND VISION

1062: SenticNet 3: A Common and Common-Sense Knowledge Base for Cognition-Driven Sentiment Analysis

Erik Cambria, Daniel Olsher, Dheeraj Rajagopal

1389: Improving Domain-Independent Cloud-Based Speech Recognition with Domain-Dependent Phonetic Post-Processing

Johannes Twiefel, Timo Baumann, Stefan Heinrich, Stefan Wermter

544: Knowledge Graph Embedding by Translating on Hyperplanes

Zhen Wang, Jianwen Zhang, Jianlin Feng, Zheng Chen

1236: Mind the Gap: Machine Translation by Minimizing the Semantic Gap in Embedding Space

Jiajun Zhang, Shujie Liu, Mu Li, Ming Zhou, Chengqing Zong

48: Hybrid Singular Value Thresholding for Tensor Completion

Xiaoqin Zhang, Zhengyuan Zhou, Di Wang, Yi Ma

307: PREGO: An Action Language for Belief-Based Cognitive Robotics in Continuous Domains

Vaishak Belle, Hector J. Levesque

302A

Technical Session: VISION

723: Learning Low-Rank Representations with Classwise Block-Diagonal Structure for Robust Face Recognition

Yong Li, Jing Liu, Zechao Li, Yangmuzi Zhang, Hanqing Lu, Songde Ma

923: Semantic Segmentation Using Multiple Graphs with Block-Diagonal Constraints

Ke Zhang, Wei Zhang, Sheng Zeng, Xiangyang Xue

1005: Locality-Constrained Low-Rank Coding for Image Classification

Ziheng Jiang, Ping Guo, Lihong Peng

1382: Diagram Understanding in Geometry Problems

Min Joon Seo, Hannaneh Hajishirzi, Ali Farhadi, Oren Etzioni

1384: Latent Domains Modeling for Visual Domain Adaptation

Caiming Xiong, Scott McCloskey, Shao-Hang Hsieh, Jason J. Corso

798: Low-Rank Tensor Learning with Discriminant Analysis for Action Classification and Image Recovery

Chengcheng Jia, Guoqiang Zhong, Yun Fu

302B

Technical Session: PLANNING AND SCHEDULING

978: Decentralized Stochastic Planning with Anonymity in Interactions

Pradeep Varakantham, Yossiri Adulyasak, Patrick Jaillet

276: Type-Based Exploration with Multiple Search Queues for Satisficing Planning

Fan Xie, Martin Müller, Robert Holte, Tatsuya Imai

708: Symbolic Domain Predictive Control

Johannes Löhr, Martin Wehrle, Maria Fox, Bernhard Nebel

1117: Grandpa Hates Robots — Interaction Constraints for Planning in Inhabited Environments

Uwe Köckemann, Federico Pecora, Lars Karlsson

1298: Cost-Based Query Optimization via AI Planning

Nathan Robinson, Sheila A. McIlraith, David Toman

1027: Computing Contingent Plans via Fully Observable Non-Deterministic Planning

Christian Muise, Vaishak Belle, Sheila A. McIlraith

303A

Technical Session: AI AND THE WEB

84: Fraudulent Support Telephone Number Identification Based on Co-occurrence Information on the Web

Xin Li, Yiqun Liu, Min Zhang, Shaoping Ma

132: Influence Maximization with Novelty Decay in Social Networks

Shanshan Feng, Xuefeng Chen, Gao Cong, Yifeng Zeng, Yeow Meng Chee, Yanping Xiang

256: Online Social Spammer Detection

Xia Hu, Jiliang Tang, Huan Liu

437: Stochastic Privacy

Adish Singla, Eric Horvitz, Ece Kamar, Ryen White

429: k -CoRating: Filling up Data to Obtain Privacy and Utility

Feng Zhang, Victor E Lee, Ruoming Jin

509: Fast and Accurate Influence Maximization on Large Networks with Pruned Monte-Carlo Simulations

Naoto Ohsaka, Takuya Akiba, Yuichi Yoshida, Ken-ichi Kawarabayashi

303B

Technical Session: GAME THEORY AND ECONOMIC PARADIGMS

326: Game-Theoretic Resource Allocation for Protecting Large Public Events

Yue Yin, Bo An, Manish Jain

512: Fixing a Balanced Knockout Tournament

Haris Aziz, Serge Gaspers, Simon Mackenzie, Nicholas Mattei, Paul Stursberg, Toby Walsh

306: Lazy Defenders Are Almost Optimal against Diligent Attackers

Avrim Blum, Nika Haghtalab, Ariel D. Procaccia

629: Preference Elicitation and Interview Minimization in Stable Matchings

Joanna Drummond, Craig Boutilier

992: Regret Transfer and Parameter Optimization

Noam Brown, Tuomas Sandholm

1508: On Detecting Nearly Structured Preference Profiles

Edith Elkind, Martin Lackner

304A/B

IAAI Paper Session: Deployed Applications

Session Chair: Ted Senator

Deployed: Deploying Community Commands: A Software Command Recommender System Case Study

Wei Li, Justin Matejka, Tovi Grossman, George Fitzmaurice

Deployed: Predictive Models for Determining If and When to Display Online Lead Forms

Timothy Chan, Joseph I, Carlos Macasaet, Daniel Kang, Robert M. Hardy, Carlos Ruiz, Rigel Porras, Brian Baron, Karim Qazi, Padraic Hannon, Tomonori Honda

Deployed: CiteSeerX: AI in a Digital Library Search Engine

Jian Wu, Kyle Williams, Hung-Hsuan Chen, Madian Khabza, Cornelia Caragea, Alexander Ororbia, Douglas Jordan, C. Lee Giles

11:50 - 1:00 PM Lunch

Hall 200A

1:00 - 2:00 PM

**AAAI-14 Presidential Address: Fascinating Research and Engaged Community
Manuela M. Veloso (Carnegie Mellon University)**

Introduction by Henry Kautz

Hall 200A

2:00 - 2:40 PM Plenary Technical Session 3

1466: Feature-Cost Sensitive Learning with Submodular Trees of Classifiers

Matt J. Kusner, Wenlin Chen, Quan Zhou, Zhixiang (Eddie) Xu, Kilian Q. Weinberger, Yixin Chen

1665: A Computational Challenge Problem in Materials Discovery: Synthetic Problem Generator and Real-World Datasets

Ronan Le Bras, Richard Bernstein, John M. Gregoire, Santosh K. Suram, Carla P. Gomes, Bart Selman, R. Bruce van Dover

1440: Collaborative Models for Referring Expression Generation in Situated Dialogue
Rui Fang, Malcolm Doering, Joyce Y. Chai

976: On Boosting Sparse Parities
Lev Reyzin

1019: Regret-Based Multi-Agent Coordination with Uncertain Task Rewards
Feng Wu, Nicholas R. Jennings

1093: How Long Will It Take? Accurate Prediction of Ontology Reasoning Performance
Yong-Bin Kang, Jeff Z. Pan, Shonali Krishnaswamy, Wudhichart Sawangphol, Yuan-Fang Li

1072: Avoiding Plagiarism in Markov Sequence Generation
Alexandre Papadopoulos, Pierre Roy, François Pachet

700: Fast Multi-Instance Multi-Label Learning
Sheng-Jun Huang, Wei Gao, Zhi-Hua Zhou

707: Modeling and Mining Spatiotemporal Patterns of Infection Risk from Heterogeneous Data for Active Surveillance Planning
Bo Yang, Hua Guo, Yi Yang, Benyun Shi, Xiaonong Zhou, Jiming Liu

1049: Scalable Sparse Covariance Estimation via Self-Concordance
Anastasios Kyrillidis, Rabeeh Karimi Mahabadi, Quoc Tran Dinh, Volkan Cevher

1514: Spatio-Temporal Consistency as a Means to Identify Unlabeled Objects in a Continuous Data Field
James Faghmous, Hung Nguyen, Matthew Le, Vipin Kumar

889: Active Learning for Crowdsourcing Using Knowledge Transfer
Meng Fang, Jie Yin, Dacheng Tao

1136: Sequential Click Prediction for Sponsored Search with Recurrent Neural Networks
Yuyu Zhang, Hanjun Dai, Chang Xu, Jun Feng, Taifeng Wang, Jiang Bian, Bin Wang, Tie-Yan Liu

652: Learning Parametric Models for Social Infectivity in Multi-Dimensional Hawkes Processes
Liangda Li, Hongyuan Zha

1477: A Convex Formulation for Semi-Supervised Multi-Label Feature Selection
Xiaojun Chang, Feiping Nie, Yi Yang, Heng Huang

497: TacTex'13: A Champion Adaptive Power Trading Agent
Daniel Urieli, Peter Stone

2:45 – 3:30 PM Parallel Technical Sessions

301A

Technical Session: MACHINE LEARNING APPLICATIONS

663: Accurate Integration of Aerosol Predictions by Smoothing on a Manifold
Shuai Zheng, James T. Kwok

718: Robust Distance Metric Learning in the Presence of Label Noise
Dong Wang, Xiaoyang Tan

1571: Predicting Postoperative Atrial Fibrillation from Independent ECG
Components
Chih-Chun Chia, James Blum, Zahi Karam, Satinder Singh, Zeeshan Syed

301B

Technical Session: HEURISTIC SEARCH AND OPTIMIZATION / RL

950: Generalizing Policy Advice with Gaussian Process Bandits for Dynamic Skill
Improvement
Jared Glover, Charlotte Zhu

301: Robust Bayesian Inverse Reinforcement Learning with Sparse Behavior Noise
Jiangchuan Zheng, Siyuan Liu, Lionel Ni

1467: Multiagent Metareasoning through Organizational Design
Jason Sleight, Edmund H. Durfee

302A

**Technical Session: Technical Session: NOVEL MACHINE LEARNING
ALGORITHMS**

434: Predicting the Hardness of Learning Bayesian Networks
Brandon Malone, Kustaa Kangas, Matti Järvisalo, Mikko Koivisto, Petri Myllymäki

1511: Relational One-Class Classification: A Non-Parametric Approach
Tushar Khot, Sriraam Natarajan, Jude Shavlik

735: User Group Oriented Temporal Dynamics Exploration
Zhiting Hu, Junjie Yao, Bin Cui

302B

Technical Session: MULTIAGENT SYSTEMS

807: Give a Hard Problem to a Diverse Team: Exploring Large Action Spaces
Leandro Soriano Marcolino, Haifeng Xu, Albert Xin Jiang, Milind Tambe, Emma Bowring

1099: Dynamic Multi-Agent Task Allocation with Spatial and Temporal Constraints
Sofia Amador, Steven Okamoto, Roie Zivan

1642: Symbolic Model Checking Epistemic Strategy Logic
Xiaowei Huang, Ron van der Meyden

303A

Technical Session: AI AND THE WEB / VISION

160: Cross-View Feature Learning for Scalable Social Image Analysis
Wenxuan Xie, Yuxin Peng, Jianguo Xiao

1358: Unsupervised Alignment of Natural Language Instructions with Video Segments
Iftexhar Naim, Young Chol Song, Qiguang Liu, Henry Kautz, Jiebo Luo, Daniel Gildea

1474: Experiments on Visual Information Extraction with the Faces of Wikipedia
Md. Kamrul Hasan, Christopher Pal

303B

Technical Session: GAME THEORY AND ECONOMIC PARADIGMS

913: Mechanism Design for Scheduling with Uncertain Execution Time.
Vincent Conitzer, Angelina Vidali

1247: Beat the Cheater: Computing Game-Theoretic Strategies for When to Kick a Gambler Out of a Casino
Troels Bjerre Sørensen, Melissa Dalis, Joshua Letchford, Dmytro Korzhyk, Vincent Conitzer

1271: A Characterization of the Single-Peaked Single-Crossing Domain
Edith Elkind, Piotr Faliszewski, Piotr Skowron

304A/B

2:00 – 3:30 PM IAAI Paper Session: Interfaces and Patterns

Session Chair: Reid Smith

Emerging: A Smart Range Helping Cognitively-Impaired Persons Cooking
Bruno Bouchard, Kevin Bouchard, Abdenour Bouzouane

Emerging: A Speech-Driven Second Screen Application for TV Program Discovery
Peter Z. Yeh, Ben Douglas, William Jarrold, Adwait Ratnaparkhi, Deepak Ramachandran, Peter F. Patel-Schneider, Stephen Laverty, Nirvana Tikku, Sean Brown, Jeremy Mendel

Emerging: Clustering Species Accumulation Curves to Identify Skill Levels of Citizen Scientists Participating in the eBird Project
Jun Yu, Weng-Keen Wong, Steve Kelling

Emerging: Pattern Discovery in Protein Networks Reveals High-Confidence Predictions of Novel Interactions
Hazem Radwan Ahmed, Janice I. Glasgow

3:30 – 5:00 PM

**Poster Session 2 / Coffee Break
Hall 200C**

Scheduled AAAI Technical Papers

All technical papers will be posted throughout the conference. Posters will be assigned to a specific board, and will be grouped by subject area. A guide will be available onsite. Papers presented in plenary sessions or in poster format only are scheduled at specific times. Each poster session is divided into two time periods. Poster Session 2 includes papers in Sections C and D, which are listed below:

* Plenary talk poster

Session C: 3:30 – 4:15 PM

AI and the Web (AIW)

480: Improving Context and Category Matching for Entity Search
Yueguo Chen, Lexi Gao, Shuming Shi, Xiaoyong Du, Ji-Rong Wen

1093: How Long Will It Take? Accurate Prediction of Ontology Reasoning Performance

Yong-Bin Kang, Jeff Z. Pan, Shonali Krishnaswamy, Wudhichart Sawangphol, Yuan-Fang Li

652: Learning Parametric Models for Social Infectivity in Multi-Dimensional Hawkes Processes

Liangda Li, Hongyuan Zha

289: Recommendation by Mining Multiple User Behaviors with Group Sparsity
Ting Yuan, Jian Cheng, Xi Zhang, Shuang Qiu, Hanqing Lu

Cognitive Systems (CS)

1512: Learning Unknown Event Models

Matthew Molineaux, David W. Aha

Computational Sustainability and AI (CSAI)

1514: Spatio-Temporal Consistency as a Means to Identify Unlabeled Objects in a Continuous Data Field

James H. Faghmous, Hung Nguyen, Matthew Le, Vipin Kumar

1665: A Computational Challenge Problem in Materials Discovery: Synthetic Problem Generator and Real-World Datasets

Ronan Le Bras, Richard Bernstein, John M. Gregoire, Santosh K. Suram, Carla P. Gomes, Bart Selman, R. Bruce van Dover

497: TacTex'13: A Champion Adaptive Power Trading Agent

Daniel Urieli, Peter Stone

707: Modeling and Mining Spatiotemporal Patterns of Infection Risk from Heterogeneous Data for Active Surveillance Planning

Bo Yang, Hua Guo, Yi Yang, Benyun Shi, Xiaonong Zhou, Jiming Liu

Game Theory and Economic Paradigms (GTEP)

1280: The Fisher Market Game: Equilibrium and Welfare

Simina Brânzei, Yiling Chen, Xiaotie Deng, Aris Filos-Ratsikas, Søren Kristoffer Stiel Frederiksen, Jie Zhang

319: Modal Ranking: A Uniquely Robust Voting Rule

Ioannis Caragiannis, Ariel D. Procaccia, Nisarg Shah

1134: Bounding the Support Size in Extensive Form Games with Imperfect Information

Martin Schmid, Matej Moravcik, Milan Hladik

Heuristic Search and Optimization (HSO)

551: Simpler Bounded Suboptimal Search

Matthew Hatem, Wheeler Ruml

Knowledge Representation and Reasoning (KRR)

875: Pathway Specification and Comparative Queries: A High Level Language with Petri Net Semantics

Saadat Anwar, Chitta Baral

453: Data Quality in Ontology-Based Data Access: The Case of Consistency

Marco Console, Maurizio Lenzerini

Machine Learning Applications (MLA)

1477: A Convex Formulation for Semi-Supervised Multi-Label Feature Selection

Xiaojun Chang, Feiping Nie, Yi Yang, Heng Huang

1136: Sequential Click Prediction for Sponsored Search with Recurrent Neural Networks

Yuyu Zhang, Hanjun Dai, Chang Xu, Jun Feng, Taifeng Wang, Jiang Bian, Bin Wang, Tie-Yan Liu

Multiagent Systems (MAS)

1019: Regret-Based Multi-Agent Coordination with Uncertain Task Rewards

Feng Wu, Nicholas R. Jennings

NLP and Machine Learning (NLPML)

1440: Collaborative Models for Referring Expression Generation in Situated Dialogue

Rui Fang, Malcolm Doering, Joyce Y. Chai

1524: Learning Concept Embeddings for Query Expansion by Quantum Entropy Minimization

Alessandro Sordani, Yoshua Bengio, Jian-Yun Nie

Novel Machine Learning Algorithms (NMLA)

889: Active Learning for Crowdsourcing Using Knowledge Transfer

Meng Fang, Jie Yin, Dacheng Tao

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Sheng-Jun Huang, Wei Gao, Zhi-Hua Zhou

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Anastasios Kyrillidis, Rabeeh Karimi Mahabadi, Quoc Tran Dinh, Volkan Cevher

976: On Boosting Sparse Parities

Lev Reyzin

Planning and Scheduling (PS)

1428: Flexible and Scalable Partially Observable Planning with Linear Translations

Blai Bonet, Hector Geffner

713: A Relevance-Based Compilation Method for Conformant Probabilistic Planning

Ran Taig, Ronen I. Brafman

Reasoning under Uncertainty (RU)

1470: An Adversarial Interpretation of Information-Theoretic Bounded Rationality

Pedro A. Ortega, Daniel D. Lee

1084: Point-Based POMDP Solving with Factored Value Function Approximation
Tiago S. Veiga, Matthijs T. J. Spaan, Pedro U. Lima

Search and Constraint Satisfaction (SCS)

1065: A Propagator Design Framework for Constraints over Sequences
Jean-Noël Monette, Pierre Flener, Justin Pearson

1072: Avoiding Plagiarism in Markov Sequence Generation
Alexandre Papadopoulos, Pierre Roy, François Pachet

Vision (VIS)

1334: A Generalized Genetic Algorithm-Based Solver for Very Large Jigsaw Puzzles of Complex Types
Dror Sholomon, Omid E. David, Nathan S. Netanyahu

Session D: 4:15 – 5:00 PM

AI and the Web (AIW)

1424: Towards Scalable Exploration of Diagnoses in an Ontology Stream
Freddy Lécué

1656: Compact Aspect Embedding for Diversified Query Expansions
Xiaohua Liu, Arbi Bouchoucha, Alessandro Sordoni, Jian-Yun Nie

356: A Joint Optimization Model for Image Summarization Based on Image Content and Tags
Hongliang Yu, Zhi-Hong Deng, Yunlun Yang, Tao Xiong

Applications (APP)

1397: Joule Counting Correction for Electric Vehicles Using Artificial Neural Networks
Michael D. Taylor

Game Theory and Economic Paradigms (GTEP)

1613: Using Response Functions to Measure Strategy Strength
Trevor Davis, Neil Burch, Michael Bowling

675: Voting with Rank Dependent Scoring Rules
Judy Goldsmith, Jérôme Lang, Nicholas Mattei, Patrice Perny

269: Regret-Based Optimization and Preference Elicitation for Stackelberg Security Games with Uncertainty
Thanh H. Nguyen, Amulya Yadav, Bo An, Milind Tambe, Craig Boutilier

738: Incentivizing High-Quality Content from Heterogeneous Users: On the

Existence of Nash Equilibrium
Yingce Xia, Tao Qin, Nenghai Yu, Tie-Yan Liu

Heuristic Search and Optimization (HSO)

1593: Relaxation Search: A Simple Way of Managing Optional Clauses
Fahiem Bacchus, Jessica Davies, Maria Tsimpoukell, George Katsirelos

Humans and AI (HAI)

445: Role-Aware Conformity Influence Modeling and Analysis in Social Networks
Jing Zhang, Jie Tang, Honglei Zhuang, Cane Wing-Ki Leung, Juanzi Li

Knowledge Representation and Reasoning (KRR)

1410: Managing Change in Graph-Structured Data Using Description Logics
Shqiponja Ahmetaj, Diego Calvanese, Magdalena Ortiz, Mantas Simkus

407: Computing General First-Order Parallel and Prioritized Circumscription
Hai Wan, Zhanhao Xiao, Zhenfeng Yuan, Heng Zhang, Yan Zhang

Machine Learning Applications (MLA)

589: Latent Low-Rank Transfer Subspace Learning for Missing Modality Recognition
Zhengming Ding, Ming Shao, Yun Fu

1417: Calibration-Free BCI Based Control
Jonathan Grizou, Iñaki Iturrate, Luis Montesano, Pierre-Yves Oudeyer, Manuel Lopes

1205: Generalized Higher-Order Tensor Decomposition via Parallel ADMM
Fanhua Shang, Yuanyuan Liu, James Cheng

1304: Doubly Regularized Portfolio with Risk Minimization
Weiwei Shen, Jun Wang, Shiqian Ma

186: Globally and Locally Consistent Unsupervised Projection
Hua Wang, Feiping Nie, Heng Huang

Multiagent Systems (MAS)

1366: Solving Zero-Sum Security Games in Discretized Spatio-Temporal Domains
Haifeng Xu, Fei Fang, Albert Xin Jiang, Vincent Conitzer, Shaddin Dughmi, Milind Tambe

NLP and Machine Learning (NLPML)

1634: Learning Scripts as Hidden Markov Models
J. Walker Orr, Prasad Tadepalli, Janardhan Rao Doppa, Xiaoli Fern, Thomas G. Dietterich

Novel Machine Learning Algorithms (NMLA)

938: Manifold Spanning Graphs

CJ Carey, Sridhar Mahadevan

125: Sample-Adaptive Multiple Kernel Learning
Xinwang Liu, Lei Wang, Jian Zhang, Jianping Yin

281: Pre-Trained Multi-View Word Embedding Using Two-Side Neural Network
Yong Luo, Jian Tang, Jun Yan, Chao Xu, Zheng Chen

1232: Mixing-Time Regularized Policy Gradient
Tetsuro Morimura, Takayuki Osogami, Tomoyuki Shirai

1309: Robust Non-Negative Dictionary Learning
Qihe Pan, Deguang Kong, Chris Ding, Bin Luo

456: Sparse Compositional Metric Learning
Yuan Shi, Aurélien Bellet, Fei Sha

19: Gradient Descent with Proximal Average for Nonconvex and Composite
Regularization
Leon Wenliang Zhong, James T. Kwok

Planning and Scheduling (PS)

421: Planning as Model Checking in Hybrid Domains
Sergiy Bogomolov, Daniele Magazzeni, Andreas Podelski, Martin Wehrle

Reasoning under Uncertainty (RU)

862: Tightening Bounds for Bayesian Network Structure Learning
Xiannian Fan, Changhe Yuan, Brandon Malone

Search and Constraint Satisfaction (SCS)

1022: Propagating Regular Counting Constraints
Nicolas Beldiceanu, Pierre Flener, Justin Pearson, Pascal Van Hentenryck

519: Diagnosing Analogue Linear Systems Using Dynamic Topological
Reconfiguration
Alexander Feldman, Gregory Provan

Vision (VIS)

1166: Towards Topological-Transformation Robust Shape Comparison: A Sparse
Representation Based Manifold Embedding Approach
Longwen Gao, Shuigeng Zhou

159: Low-Rank Tensor Completion with Spatio-Temporal Consistency
Hua Wang, Feiping Nie, Heng Huang

304A/B

4:00 – 5:00 PM

IAAI Discussion Panel: From Research to Deployed Applications: Crossing the Valley of Death

Panelists: Craig Knoblock, Adam Cheyer, David Gunning

5:00 – 6:00 PM

Speed Dating

Room 206A/B

6:00 – 7:15 PM

Pasta Bar available in Hall 200C

7:30 – 10:30 PM

Fun & Games Night

Room 206A/B

Thursday, July 31

8:40 – 9:25 AM What's Hot / Senior Member Sessions

301A

What's Hot Session: ICML/RSS/ICLR

What's Hot: Challenges in Machine Learning

Thorsten Joachims

What's Hot: What's Hot in Robotics

Ashutosh Saxena

What's Hot: What's Hot in Learning Representations

Aaron Courville

301B

Senior Member Session

Senior Member: Automating Science: A Grand Challenge for AI

Vasant Honavar

Senior Member: Themes and Progress in Computational Scientific Discovery

Pat Langley

Senior Member: Task Learning: a Challenge Problem for Integrated Intelligent

Agents John Laird, Kenneth Forbus

303A

Senior Member Session / IJCAI-JAIR 2014 Best Paper

Senior Member: Tackling Real World Data Streams: a Call to Arms
Bernhard Pfahringer

Senior Member: Computational Social Choice
Francesca Rossi

IJCAI-JAIR 2014 Best Paper: Wikipedia-based Semantic Interpretation for Natural Language Processing
Evgeniy Gabrilovich and Shaul Markovitch (2009)

303B

What's Hot Session: AIIDE/CP/QA

What's Hot: Challenges in Interactive Entertainment
Kevin Dill

What's Hot: Challenges in Constraint Programming
Pascal Van Hentenryck

What's Hot: Challenges Beyond Factoid Question Answering
Ken Barker

9:25 – 9:55 AM Parallel Technical Sessions

301A

Technical Session: NOVEL MACHINE LEARNING ALGORITHMS

279: Exact Subspace Clustering in Linear Time
Shusen Wang, Bojun Tu, Congfu Xu, Zhihua Zhang

1001: Learning with Augmented Class by Exploiting Unlabeled Data
Qing Da, Yang Yu, Zhi-Hua Zhou

301B

Technical Session: NOVEL MACHINE LEARNING ALGORITHMS

874: Power Iterated Color Refinement
Kristian Kersting, Martin Mladenov, Roman Garnet, Martin Grohe

1021: Convex Co-Embedding
Farzaneh Mirzazadeh, Yuhong Guo, Dale Schuurmans

302A

Technical Session: GAME DESIGN/INTELLIGENT TUTORING

1667: Synthesis of Geometry Proof Problems

Chris Alvin, Sumit Gulwani, Rupak Majumdar, Supratik Mukhopadhyay

843: Automatic Game Design via Mechanic Generation

Alexander Zook, Mark O. Riedl

302B

Technical Session: HEURISTIC SEARCH AND OPTIMIZATION / PLANNING AND SCHEDULING

1025: Optimal Decomposition in Linear Constraint Systems

Cees Witteveen, Michel Wilson, Tomas Klos

253: Cached Iterative Weakening for Optimal Multi-Way Number Partitioning

Ethan L. Schreiber, Richard E. Korf

303A

Technical Session: MACHINE LEARNING / VISION

96: Supervised Hashing for Image Retrieval via Image Representation Learning

Rongkai Xia, Yan Pan, Hanjiang Lai, Cong Liu, Shuicheng Yan

424: Predicting Emotions in User-Generated Videos

Yu-Gang Jiang, Baohan Xu, Xiangyang Xue

303B

Technical Session: HEURISTIC SEARCH AND OPTIMIZATION

803: Programming by Example Using Least General Generalizations

Mohammad Raza, Sumit Gulwani, Natasa Milic-Frayling

1321: Distribution-Aware Sampling and Weighted Model Counting for SAT

Supratik Chakraborty, Daniel J. Fremont, Kuldeep S. Meel, Sanjit A. Seshia, Moshe Y. Vardi

304A/B

9:00 – 10:00 AM IAAI Paper Session: Crowdsourcing

Session Chair: Karen Haigh

Emerging: Robust Protection of Fisheries with COMPASS

William B. Haskell, Debarun Kar, Fei Fang, Milind Tambe, Sam Cheung, Lt. Elizabeth Denicola

Emerging: Swissnoise: Online Polls with Game-Theoretic Incentives

Florent Garcin, Boi Faltings

Emerging: Crowdsourcing for Multiple-Choice Question Answering
Bahadir Ismail Aydin, Yavuz Selim Yilmaz, Yaliang Li, Qi Li, Jing Gao, Murat Demirbas

9:55 – 10:15 AM Break

Hall 200A

10:15 – 11:15 AM

**AAAI-14 Invited Talk: Game Theory for Security: Key Algorithmic Principles,
Deployed Applications, Research Challenges**

Milind Tambe (University of Southern California)

Introduction by Peter Stone

304A/B

10:15 – 11:45 AM IAAI Paper Session: Transportation and Personalization

Session Chair: Nestor Rychtyckyj

Emerging: A Unified Framework for Augmented Reality and Knowledge-Based
Systems in Maintaining Aircraft

Geun-Sik Jo, Kyeong-Jin Oh, Inay Ha, Kee-Sung Lee, Myung-Duk Hong, Ulrich
Neumann, Sua You

Emerging: Optimizing a Start-Stop Controller Using Policy Search

Noel Hollingsworth, Jason Meyer, Ryan McGee, Jeffrey Doering, George Konidaris,
Leslie Kaelbling

Emerging: Advice Provision for Energy Saving in Automobile Climate Control
Systems

Amos Azaria, Sarit Kraus, Claudia V. Goldman, Omer Tsimhoni

Emerging: StrokeBank: Automating Personalized Chinese Handwriting Generation

Alfred Zong, Yuke Zhu

11:20 AM – 12:20 PM Parallel Technical Sessions

301A

Technical Session: NOVEL MACHINE LEARNING ALGORITHMS

1488: A Spatially Sensitive Kernel to Predict Cognitive Performance from Short-
Term Changes in Neural Structure

M. Hidayath Ansari, Michael H. Coen, Barbara B. Bendlin, Mark A. Sager, Sterling C.
Johnson

78: Online Classification Using a Voted RDA Method

Tianbing Xu, Jianfeng Gao, Lin Xiao, Amelia C. Regan

1723: Bagging by Design (on the Suboptimality of Bagging)
Periklis A. Papakonstantinou, Jia Xu, Zhu Cao

853: LASS: A Simple Assignment Model with Laplacian Smoothing
Miguel Á. Carreira-Perpiñán, Weiran Wang

301B

Technical Session: NLP AND MACHINE LEARNING

432: Adaptive Multi-Compositionality for Recursive Neural Models with Applications to Sentiment Analysis
Li Dong, Furu Wei, Ming Zhou, Ke Xu

940: On Dataless Hierarchical Text Classification
Yangqiu Song, Dan Roth

1029: Instance-Based Domain Adaptation in NLP via In-Target-Domain Logistic Approximation
Rui Xia, Jianfei Yu, Feng Xu, Shumei Wang

1294: Semi-Supervised Matrix Completion for Cross-Lingual Text Classification
Min Xiao, Yuhong Guo

302A

Technical Session: SEARCH AND CONSTRAINT SATISFACTION

1225: Maximum Satisfiability Using Core-Guided MAXSAT Resolution
Nina Narodytska, Fahiem Bacchus

1344: Adaptive Singleton-Based Consistencies
Amine Balafrej, Christian Bessiere, El Houssine Bouyakhf, Gilles Trombettoni

1373: A Reasoner for the RCC-5 and RCC-8 Calculi Extended with Constants
Stella Giannakopoulou, Charalampos Nikolaou, Manolis Koubarakis

560: Fast Consistency Checking of Very Large Real-World RCC-8 Constraint Networks Using Graph Partitioning
Charalampos Nikolaou, Manolis Koubarakis

302B

Technical Session: AI & THE WEB/NLP AND TEXT MINING

1362: Acquiring Comparative Commonsense Knowledge from the Web
Niket Tandon, Gerard de Melo, Gerhard Weikum

425: Emotion Classification in Microblog Texts Using Class Sequential Rules
Shiyang Wen, Xiaojun Wan

834: SUIT: A Supervised User-Item Based Topic Model for Sentiment Analysis
Fangtao Li, Sheng Wang, Shenghua Liu, Ming Zhang

1618: Where and Why Users "Check In"
Yoon-Sik Cho, Greg Ver Steeg, Aram Galstyan

303A

Technical Session: COMPUTATIONAL SUSTAINABILITY AND AI

961: Spatial Scan for Disease Mapping on a Mobile Population
Liang Lan, Vuk Malbasa, Slobodan Vucetic

1238: Rounded Dynamic Programming for Tree-Structured Stochastic Network Design
Xiaojian Wu, Daniel Sheldon, Shlomo Zilberstein

1314: Efficient Buyer Groups for Prediction-of-Use Electricity Tariffs
Valentin Robu, Meritxell Vinyals, Alex Rogers, Nicholas R. Jennings

1462: Effective Management of Electric Vehicle Storage Using Smart Charging
Konstantina Valogianni, Wolfgang Ketter, John Collins, Dmitry Zhdanov

303B

Technical Session: MULTIAGENT SYSTEMS / GAME THEORY AND ECONOMIC PARADIGMS

147: Multi-Organ Exchange: The Whole Is Greater than the Sum of its Parts
John P. Dickerson, Tuomas Sandholm

270: The Computational Rise and Fall of Fairness
John P. Dickerson, Jonathan Goldman, Jeremy Karp, Ariel D. Procaccia, Tuomas Sandholm

475: Online (Budgeted) Social Choice
Joel Oren, Brendan Lucier

173: Scalable Complex Contract Negotiation with Structured Search and Agenda Management
Xiaoqin Shelley Zhang, Mark Klein, Ivan Marsa-Maestre

12:20 – 1:30 PM Lunch

Hall 200A

1:30 – 2:30 PM

AAAI-14 Invited Talk

Padhraic Smyth (University of California, Irvine)

Introduction by Carla Brodley

2:35 – 3:35 PM Parallel Technical Sessions

301A

Technical Session: NOVEL MACHINE LEARNING ALGORITHMS

130: Reconsidering Mutual Information Based Feature Selection: A Statistical Significance View

Xuan Vinh Nguyen, Jeffrey Chan, James Bailey

571: Efficient Generalized Fused Lasso and Its Application to the Diagnosis of Alzheimer's Disease

Bo Xin, Yoshinobu Kawahara, Yizhou Wang, Wen Gao

948: The Role of Dimensionality Reduction in Classification

Weiran Wang, Miguel Á. Carreira-Perpiñán

952: Deep Modeling of Group Preferences for Group-Based Recommendation

Liang Hu, Jian Cao, Guandong Xu, Longbing Cao, Zhiping Gu, Wei Cao

301B

Technical Session: HUMANS AND AI

852: Dramatis: A Computational Model of Suspense

Brian O'Neill, Mark Riedl

1048: Ordering Effects and Belief Adjustment in the Use of Comparison Shopping Agents

Chen Hajaj, Noam Hazon, David Sarne

1404: A Strategy-Aware Technique for Learning Behaviors from Discrete Human Feedback

Robert Loftin, James MacGlashan, Bei Pang, Matthew E. Taylor, Michael L. Littman, Jeff Huang, David L. Roberts

75: Discovering Better AAAI Keywords via Clustering with Community-Sourced Constraints

Kelly Moran, Byron C. Wallace, Carla E. Brodley

302A

Technical Session: GAME THEORY AND ECONOMIC PARADIGMS

34: A Generalization of Probabilistic Serial to Randomized Social Choice
Haris Aziz, Paul Stursberg

617: Biased Games
Ioannis Caragiannis, David Kurokawa, Ariel D. Procaccia

375: Simultaneous Cake Cutting
Eric Balkanski, Simina Brânzei, David Kurokawa, Ariel D. Procaccia

528: Incomplete Preferences in Single-Peaked Electorates
Martin Lackner

302B

Technical Session: PLANNING AND SCHEDULING

145: Solving Uncertain MDPs by Reusing State Information and Plans
Ping Hou, William Yeoh, Tran Cao Son

778: Structured Possibilistic Planning Using Decision Diagrams
Nicolas Drougard, Florent Teichtel-Königsbuch, Jean-Loup Farges, Didier Dubois

820: A Simple Polynomial-Time Randomized Distributed Algorithm for Connected
Row Convex Constraints
T. K. Satish Kumar, Duc Thien Nguyen, William Yeoh, Sven Koenig

861: Chance-Constrained Probabilistic Simple Temporal Problems
Cheng Fang, Peng Yu, Brian C. Williams

303A

Technical Session: APPLICATIONS

1751: A Hybrid Grammar-Based Approach for Learning and Recognizing Natural
Hand Gestures
Amir Sadeghipour, Stefan Kopp

683: A Machine Learning Approach to Musically Meaningful Homogeneous Style
Classification
William Herlands, Ricky Der, Yoel Greenberg, Simon Levin

534: Forecasting Potential Diabetes Complications
Yang Yang, Walter Luyten, Lu Liu, Marie-Francine Moens, Jie Tang, Juanzi Li

303B

Technical Session: ROBOTICS

1449: Efficient Optimization for Autonomous Manipulation of Natural Objects

Abdeslam Boularias, J. Andrew Bagnell, Anthony Stentz

1011: Qualitative Planning with Quantitative Constraints for Online Learning of Robotic Behaviours

Timothy Wiley, Claude Sammut, Ivan Bratko

192: Learning from Unscripted Deictic Gesture and Language for Human-Robot Interactions

Cynthia Matuszek, Liefeng Bo, Luke Zettlemoyer, Dieter Fox

681: Minimising Undesired Task Costs in Multi-Robot Task Allocation Problems with In-Schedule Dependencies

Bradford Heap, Maurice Pagnucco

3:35 – 5:30 PM

Poster Session 3 / Coffee Break

Hall 200C

Scheduled AAAI Technical Papers

All technical papers will be posted throughout the conference. Posters will be assigned to a specific board, and will be grouped by subject area. A guide will be available onsite. Papers presented in plenary sessions or in poster format only are scheduled at specific times. Each poster session is divided into two time periods. Poster Session 2 includes papers in Sections E and F, which are listed below:

Session E: 3:35 – 4:30 PM

AI and the Web (AIW)

225: Context-Aware Collaborative Topic Regression with Social Matrix Factorization for Recommender Systems

Chaochao Chen, Xiaolin Zheng, Yan Wang, Fuxing Hong, Zhen Lin

1328: CORECLUSTER: A Degeneracy Based Graph Clustering Framework

Christos Giatsidis, Fragkiskos D. Malliaros, Dimitrios M. Thilikos, Michalis Vazirgiannis

Applications (APP)

3: GenEth: A General Ethical Dilemma Analyzer

Michael Anderson, Susan Leigh Anderson

Cognitive Systems (CS)

1499: Large-Scale Analogical Reasoning

Vinay K. Chaudhri, Stijn Heymans, Aaron Spaulding, Adam Overholtzer, Michael Wessel

Game Playing and Interactive Entertainment (GPIE)

893: Solving the Inferential Frame Problem in the General Game Description Language

Javier Romero, Abdallah Saffidine, Michael Thielscher

Game Theory and Economic Paradigms (GTEP)

1089: A Multiarmed Bandit Incentive Mechanism for Crowdsourcing Demand Response in Smart Grids

Shweta Jain, Balakrishnan Narayanaswamy, Y. Narahari

615: Envy-Free Division of Sellable Goods

Jeremy Karp, Aleksandr M. Kazachkov, Ariel D. Procaccia

1052: Strategyproof Exchange with Multiple Private Endowments

Taiki Todo, Haixin Sun, Makoto Yokoo

Heuristic Search and Optimization (HSO)

436: Parallel Restarted Search

Andre A. Cire, Serdar Kadioglu, Meinolf Sellmann

Knowledge Representation and Reasoning (KRR)

1201: Local-to-Global Consistency Implies Tractability of Abduction

Michał Wrona

1679: Contraction and Revision over DL-Lite TBoxes

Zhiqiang Zhuang, Zhe Wang, Kewen Wang, Guilin Qi

Machine Learning Applications (MLA)

1037: SOML: Sparse Online Metric Learning with Application to Image Retrieval

Xingyu Gao, Steven C.H. Hoi, Yongdong Zhang, Ji Wan, Jintao Li

653: User Intent Identification from Online Discussions Using a Joint Aspect-Action Topic Model

Ghasem Heyrani-Nobari, Tat-Seng Chua

77: Direct Semantic Analysis for Social Image Classification

Zhiwu Lu, Liwei Wang, Ji-Rong Wen

591: Adaptive Knowledge Transfer for Multiple Instance Learning in Image Classification

Qifan Wang, Lingyun Ruan, Luo Si

Multiagent Systems (MAS)

959: Internally Stable Matchings and Exchanges

Yicheng Liu, Pingzhong Tang, Wenyi Fang

NLP and Machine Learning (NLPML)

1385: Fused Feature Representation Discovery for High-Dimensional and Sparse Data

Jun Suzuki, Masaaki Nagata

NLP and Text Mining (NLPTM)

1712: Chinese Zero Pronoun Resolution: An Unsupervised Approach Combining Ranking and Integer Linear Programming

Chen Chen, Vincent Ng

Novel Machine Learning Algorithms (NMLA)

346: Optimal Neighborhood Preserving Visualization by Maximum Satisfiability

Kerstin Bunte, Matti Järvisalo, Jeremias Berg, Petri Myllymäki, Jaakko Peltonen, Samuel Kaski

561: PAC Rank Elicitation through Adaptive Sampling of Stochastic Pairwise Preferences

Róbert Busa-Fekete, Balázs Szörényi, Eyke Hüllermeier

252: A Local Non-Negative Pursuit Method for Intrinsic Manifold Structure Preservation

Dongdong Chen, Jian Cheng Lv, Zhang Yi

1566: Natural Temporal Difference Learning

William Dabney, Philip S. Thomas

1007: Finding Median Point-Set Using Earth Mover's Distance

Hu Ding, Jinhui Xu

967: Intra-View and Inter-View Supervised Correlation Analysis for Multi-View Feature Learning

Xiao-Yuan Jing, Rui-Min Hu, Yang-Ping Zhu, Shan-Shan Wu, Chao Liang, Jing-Yu Yang

767: Monte Carlo Filtering Using Kernel Embedding of Distributions

Motonobu Kanagawa, Yu Nishiyama, Arthur Gretton, Kenji Fukumizu

1105: Pairwise-Covariance Linear Discriminant Analysis

Deguang Kong, Chris Ding

Planning and Scheduling (PS)

157: Delivering Guaranteed Display Ads under Reach and Frequency Requirements

Ali Hojjat, John Turner, Suleyman Cetintas, Jian Yang

Reasoning under Uncertainty (RU)

930: Testable Implications of Linear Structural Equation Models

Bryant Chen, Jin Tian, Judea Pearl

1296: Tree-Based On-Line Reinforcement Learning
André da Motta Salles Barreto

Robotics (ROB)

1614: Optimal and Efficient Stochastic Motion Planning in Partially-Known Environments

Ryan Luna, Morteza Lahijanian, Mark Moll, Lydia E. Kavraki

Search and Constraint Satisfaction (SCS)

1370: Q-Intersection Algorithms for Constraint-Based Robust Parameter Estimation
Clement Carbonnel, Gilles Trombettoni, Philippe Vismara, Gilles Chabert

70: Double Configuration Checking in Stochastic Local Search for Satisfiability
Chuan Luo, Shaowei Cai, Wei Wu, Kaile Su

Vision (VIS)

237: Deep Saliency: Visual Saliency Modeling via Deep Belief Propagation
Richard Jiang, Danny Crookes

Session F: 4:30 – 5:30 PM

AI and the Web (AIW)

586: Machine Translation with Real-Time Web Search
Lei Cui, Ming Zhou, Qiming Chen, Dongdong Zhang, Mu Li

1652: Mapping Users across Networks by Manifold Alignment on Hypergraph
Shulong Tan, Ziyu Guan, Deng Cai, Xuzhen Qin, Jiajun Bu, Chun Chen

288: Trust Prediction with Propagation and Similarity Regularization
Xiaoming Zheng, Yan Wang, Mehmet A. Orgun, Youliang Zhong, Guanfeng Liu

Applications (APP)

1290: Huffman Coding for Storing Non-Uniformly Distributed Messages in Networks of Neural Cliques

Bartosz Boguslawski, Vincent Gripon, Fabrice Seguin, Frédéric Heitzmann

Computational Sustainability and AI (CSAI)

1324: Supervised Scoring with Monotone Multidimensional Splines
Abraham Othman

Game Theory and Economic Paradigms (GTEP)

1096: Binary Aggregation by Selection of the Most Representative Voter
Ulle Endriss, Umberto Grandi

1312: On the Axiomatic Characterization of Runoff Voting Rules
Rupert Freeman, Markus Brill, Vincent Conitzer

624: Potential-Aware Imperfect-Recall Abstraction with Earth Mover's Distance in Imperfect-Information Games
Sam Ganzfried, Tuomas Sandholm

Heuristic Search and Optimization (HSO)

1564: Worst-Case Solution Quality Analysis When Not Re-Expanding Nodes in Best-First Search
Richard Valenzano, Nathan R. Sturtevant, Jonathan Schaeffer

Humans and AI (HAI)

2: Leveraging Fee-Based, Imperfect Advisors in Human-Agent Games of Trust
Cody Buntain, Amos Azaria, Sarit Kraus

Knowledge Representation and Reasoning (KRR)

1138: Exploiting Support Sets for Answer Set Programs with External Evaluations
Thomas Eiter, Michael Fink, Christoph Redl, Daria Stepanova

839: Qualitative Reasoning with Modelica Models
Matthew Klenk, Johan de Kleer, Daniel G. Bobrow, Bill Janssen

Machine Learning Applications (MLA)

332: Proximal Iteratively Reweighted Algorithm with Multiple Splitting for Nonconvex Sparsity Optimization
Canyi Lu, Yunchao Wei, Zhouchen Lin, Shuicheng Yan

682: Agent Behavior Prediction and Its Generalization Analysis
Fei Tian, Haifang Li, Wei Chen, Tao Qin, Enhong Chen, Tie-Yan Liu

848: Evaluating Trauma Patients: Addressing Missing Covariates with Joint Optimization
Alex Van Esbroeck, Satinder Singh, Ilan Rubinfeld, Zeeshan Syed

384: Feature Selection at the Discrete Limit
Miao Zhang, Chris Ding, Ya Zhang, Feiping Nie

Multiagent Systems (MAS)

801: Decentralized Multi-Agent Reinforcement Learning in Average-Reward Dynamic DCOPs
Duc Thien Nguyen, William Yeoh, Hoong Chuin Lau, Shlomo Zilberstein, Chongjie Zhang

NLP and Machine Learning (NLPML)

1468: Prediction of Helpful Reviews Using Emotions Extraction
Lionel Martin, Pearl Pu

Novel Machine Learning Algorithms (NMLA)

348: Dynamic Bayesian Probabilistic Matrix Factorization
Sotirios P. Chatzis

1492: Coactive Learning for Locally Optimal Problem Solving
Robby Goetschalckx, Alan Fern, Prasad Tadepalli

650: Partial Multi-View Clustering
Shao-Yuan Li, Yuan Jiang, Zhi-Hua Zhou

1195: Semantic Data Representation for Improving Tensor Factorization
Makoto Nakatsuji, Yasuhiro Fujiwara, Hiroyuki Toda, Hiroshi Sawada, Jin Zheng,
James A. Hendler

955: Locality Preserving Projection for Domain Adaptation with Multi-Objective
Learning
Le Shu, Tianyang Ma, Longin Jan Latecki

164: Robust Multi-View Spectral Clustering via Low-Rank and Sparse
Decomposition
Rongkai Xia, Yan Pan, Lei Du, Jian Yin

427: Novel Density-Based Clustering Algorithms for Uncertain Data
Xianchao Zhang, Han Liu, Xiaotong Zhang, Xinyue Liu

799: Hybrid Heterogeneous Transfer Learning through Deep Learning
Joey Tianyi Zhou, Sinno Jialin Pan, Ivor W. Tsang, Yan Yan

Planning and Scheduling (PS)

1240: Using Timed Game Automata to Synthesize Execution Strategies for Simple
Temporal Networks with Uncertainty
Alessandro Cimatti, Luke Hunsberger, Andrea Micheli, Marco Roveri

679: Efficiently Implementing GOLOG with Answer Set Programming
Malcolm Ryan

Reasoning under Uncertainty (RU)

597: Finding the k -Best Equivalence Classes of Bayesian Network Structures for
Model Averaging
Yetian Chen, Jin Tian

Search and Constraint Satisfaction (SCS)

1015: Preprocessing for Propositional Model Counting
Jean-Marie Lagniez, Pierre Marquis

Vision (VIS)

112: Similarity-Preserving Binary Signature for Linear Subspaces
Jianqiu Ji, Jianmin Li, Shuicheng Yan, Qi Tian, Bo Zhang

1193: Uncorrelated Multi-View Discrimination Dictionary Learning for Recognition
Xiao-Yuan Jing, Rui-Min Hu, Fei Wu, Xi-Lin Chen, Qian Liu, Yong-Fang Yao

**5:30 – 6:30 PM AAI-14 Video Competition Awards
(Main Hall, Foyer 4, Loggia)**