AAAI-15 Technical Paper Schedule

Tuesday, January 27

8:30 - 8:55

Welcome and Opening Remarks, AAAI Organizational Awards/Honors

9:00 - 9:50

AAAI-15 Invited Talks (2 parallel)

Zilker Ballroom

AAAI-15/IAAI-15 Joint Invited Talk
Oren Etzioni (Allen Institute for Artificial Intelligence (AI2))
You Can't Play 20 Questions with Nature and Win
Introduction by David Gunning

Texas Ballroom

AAAI-15 Invited Talk
Drew Bagnell (Carnegie Mellon University)
Artificial Intelligence, Machine Learning and Robotics: Interplay and Interaction
Introduction by Michael Beetz

9:50 - 10:10

Coffee Break

10:10 - 11:50

AAAI-15 Technical Sessions / Funding Information Session

Texas I

Machine Learning 1

Talks
Easily Accessible Paper
17: On Machine Learning towards Predictive Sales Pipeline Analytics
Junchi Yan, Chao Zhang, Hongyuan Zha, Min Gong, Changhua Sun, Jin Huang,
Stephen Chu, Xiaokang Yang

169: Forecasting Collector Road Speeds under High Percentage of Missing Data
Xin Xin, Chunwei Lu, Yashen Wang, Heyan Huang

1191: Identifying At-Risk Students in Massive Open Online Courses
Jiazhen He, James Bailey, Benjamin I. P. Rubinstein, Rui Zhang

1858: Tensor-Based Learning for Predicting Stock Movements
Qing Li, LiLing Jiang, Ping Li, Hsinchun Chen

2129: Automatic Assessment of OCR Quality in Historical Documents
Anshul Gupta, Ricardo Gutierrez-Osuna, Matthew Christy, Boris Capitanu, Loretta
Auvil, Liz Grumbach, Richard Furuta, Laura Mandell

2196: Burst Time Prediction in Cascades
Senzhang Wang, Zhao Yan, Xia Hu, Philip S. Yu, Zhoujun Li

Poster Ads
27: Learning to Hash on Structured Data
Qifan Wang, Luo Si, Bin Shen

284: Generalized Singular Value Thresholding
Canyi Lu, Changbo Zhu, Chunyan Xu, Shuicheng Yan, Zhouchen Lin

1719: A Sparse Combined Regression-Classification Formulation for Learning a
Physiological Alternative to Clinical Post-Traumatic Stress Disorder Scores
Sarah M. Brown, Andrea Webb, Rami S. Mangoubi, Jennifer G. Dy

1977: An SVD and Derivative Kernel Approach to Learning from Geometric Data
Eric Wong, J. Zico Kolter

1993: Efficient Benchmarking of Hyperparameter Optimizers via Surrogates
Katharina Eggensperger, Frank Hutter, Holger H. Hoos, Kevin Leyton-Brown

Texas II-III

Computational Sustainability and AI 1

Talks
640: Energy Disaggregation via Learning 'Powerlets' and Sparse Coding
Ehsan Elhamifar, Shankar Sastry

2175: Power System Restoration with Transient Stability
Hassan Hijazi, Terrence W.K. Mak, Pascal Van Hentenryck

514: Resilient Upgrade of Electrical Distribution Grids
Emre Yamangil, Russell Bent, Scott Backhaus

525: Towards Optimal Solar Tracking: A Dynamic Programming Approach
Athanasios Aris Panagopoulos, Georgios Chalkiadakis, Nicholas R. Jennings

2317: Learning Large-Scale Dynamic Discrete Choice Models of Spatio-Temporal
Preferences with Application to Migratory Pastoralism in East Africa
Stefano Ermon, Yexiang Xue, Russell Toth, Bistra Dilkina, Richard Bernstein,
Theodoros Damoulas, Patrick Clark, Steve DeGloria, Andrew Mude, Christopher
Barrett, Carla P. Gomes

Poster Ads
465: Convergent Plans for Large-Scale Evacuations
Caroline Even, Victor Pillac, Pascal Van Hentenryck

1067: Predisaster Preparation of Transportation Networks
Hermann Schichl, Meinolf Sellmann

450: SmartShift: Expanded Load Shifting Incentive Mechanism for Risk-Averse Consumers
Bochao Shen, Balakrishnan Narayanaswamy, Ravi Sundaram

2016: Best-Response Planning of Thermostatically Controlled Loads under Power Constraints
Frits de Nijs, Matthijs T. J. Spaan, Mathijs M. De Weerdt

2026: Influence-Driven Model for Time Series Prediction from Partial Observations
Saima Aman, Charalampos Chelmis, Viktor K. Prasanna

1073: A Nonparametric Online Model for Air Quality Prediction
Vitor Guizilini, Fabio Ramos

2031: Cognitive Social Learners: An Architecture for Modeling Normative Behavior
Rahmatollah Beheshti, Awrad Mohammed Ali, Gita Sukthankar

Texas V-VI

Knowledge Representation and Reasoning 1

Talks
11: The Relative Expressiveness of Abstract Argumentation and Logic Programming
Hannes Strass

206: Grounded Fixpoints
Bart Bogaerts, Joost Vennekens, Marc Denecker

729: Exploiting Parallelism for Hard Problems in Abstract Argumentation
Federico Cerutti, Ilias Tachmazidis, Mauro Vallati, Sotirios Batsakis, Massimiliano Giacomin, Grigoris Antoniou

1360: On Computing Explanations in Argumentation
Xiuyi Fan, Francesca Toni

1478: LARS: A Logic-Based Framework for Analyzing Reasoning over Streams
Harald Beck, Minh Dao-Tran, Thomas Eiter, Michael Fink

2014: Logic Programming in Assumption-Based Argumentation Revisited — Semantics and Graphical Representation
Claudia Schulz, Francesca Toni

Poster Ads
1384: On Elementary Loops and Proper Loops for Disjunctive Logic Programs
Jianmin Ji, Hai Wan, Peng Xiao

1387: Splitting a Logic Program Revisited
Jianmin Ji, Hai Wan, Ziwei Huo, Zhenfeng Yuan

Hill Country AB

Planning and Scheduling 1

Talks

1595: Better Be Lucky than Good: Exceeding Expectations in MDP Evaluation
Thomas Keller, Florian Geißer

1769: Factored MCTS for Large Scale Stochastic Planning
Hao Cui, Roni Khardon, Alan Fern, Prasad Tadepalli

1923: Hierarchical Monte-Carlo Planning
Ngo Anh Vien, Marc Toussaint

2200: Efficient Bounds in Heuristic Search Algorithms for Stochastic Shortest Path Problems
Eric A. Hansen, Ibrahim Abdoulahi

2356: Preference Planning for Markov Decision Processes
Meilun Li, Zhikun She, Andrea Turrini, Lijun Zhang

655: Information Gathering and Reward Exploitation of Subgoals for POMDPs
Hang Ma, Joelle Pineau

Poster Ads

1203: Solving Uncertain MDPs with Objectives that Are Separable over Instantiations of Model Uncertainty
Yossiri Adulyasak, Pradeep Varakantham, Asrar Ahmed, Patrick Jaillet

2066: Representation Discovery for MDPs Using Bisimulation Metrics
Sherry Shanshan Ruan, Gheorghe Comanici, Prakash Panangaden, Doina Precup

2006: Real-Time Symbolic Dynamic Programming for Hybrid MDPs
Luis G. R. Vianna, Leliane N. de Barros, Scott Sanner

1105: Agnostic System Identification for Monte Carlo Planning
Erik Talvitie

1095: Improving Exploration in UCT Using Local Manifolds
Sriram Srinivasan, Erik Talvitie, Michael Bowling

Big Bend

Game Theory and Economic Paradigms 1

Talks

109: Conventional Machine Learning for Social Choice
John A. Doucette, Kate Larson, Robin Cohen

255: Fully Proportional Representation with Approval Ballots: Approximating the MaxCover Problem with Bounded Frequencies in FPT Time
Piotr Skowron, Piotr Faliszewski

271: Justified Representation in Approval-Based Committee Voting
Haris Aziz, Markus Brill, Vincent Conitzer, Edith Elkind, Rupert Freeman, Toby Walsh

606: A Complexity Approach for Core-Selecting Exchange with Multiple Indivisible Goods under Lexicographic Preferences
Etsushi Fujita, Julien Lesca, Akihisa Sonoda, Taiki Todo, Makoto Yokoo

1079: Voting Rules As Error-Correcting Codes
Ariel D. Procaccia, Nisarg Shah, Yair Zick

1543: Egalitarian Collective Decision Making under Qualitative Possibilistic Uncertainty: Principles and Characterization
Nahla Ben Amor, Fatma Essghaier, Hélène Fargier

Poster Ads
20: Plurality Voting under Uncertainty
Reshef Meir

1724: On the Convergence of Iterative Voting: How Restrictive Should Restricted Dynamics Be?
Svetlana Obraztsova, Evangelos Markakis, Maria Polukarov, Zinovi Rabinovich, Nicholas R. Jennings

1756: Approximating Optimal Social Choice under Metric Preferences
Elliot Anshelevich, Onkar Bhardwaj, John Postl

309: Elections with Few Voters: Candidate Control Can Be Easy
Jiehua Chen, Piotr Faliszewski, Rolf Niedermeier, Nimrod Talmon

727: Envy-Free Cake-Cutting in Two Dimensions
Erel Segal-Halevi, Avinatan Hassidim, Yonatan Aumann

Texas VII

Funding Information Session

Hill Country CD (IAAI)

IAAI-15: Machine Learning, Information Fusion, and HCI

Emerging: Day-Ahead Hail Prediction Integrating Machine Learning with Storm-Scale Numerical Weather Models
David John Gagne II, Amy McGovern, Jerald Brotzge, Michael Coniglio, James Correia Jr., Ming Xue

Emerging: Capturing Human Route Preferences from Track Information: New Results
Johnathan Gohde, Mark Boddy, Hazel Shackleton, Steve Johnston

Emerging: A Robust and Extensible Tool for Data Integration Using Data Type Models
Andres Quiroz, Eric Huang, Luca Ceriani

Emerging: Maestoso: An Intelligent Educational Sketching Tool for Learning Music Theory
Paul Taele, Laura Barreto, Tracy Hammond

11:50 - 1:20

Lunch Break

1:20 - 1:50

AAAI-15 Senior Member Blue Sky Award Talks / What's Hot Talks

Zilker Ballroom

Senior Member Blue Sky Award Talks 1

Machine Teaching: An Inverse Problem to Machine Learning and an Approach toward Optimal Education
Xiaojin Zhu

Emerging Architectures for Global System Science
Michela Milano, Pascal Van Hentenryck

Texas Ballroom I

What's Hot Talks 1

What's Hot in the General Game Playing Competition
Michael Genesereth

What's Hot in the RoboCup@Home Competition
Sven Wachsmuth
(Abstract: RoboCup@Home – Benchmarking Domestic Service Robots by Sven Wachsmuth, Dirk Holz, Maja Rudinac, Javier Ruiz-del-Solar)

Texas Ballroom II-III

What's Hot Talks 2

What's Hot in Intelligent Robots and Systems (IROS)
Lynne Parker

What's Hot in Computer Vision and Pattern Recognition (CVPR)
Rene Vidal

1:55 - 3:10

AAAI-15 Technical Sessions / Robotics: Science and Systems 2014 Presentations (RSS)

Texas I

Machine Learning 2

Talks
1097: Learning Multi-Level Task Groups in Multi-Task Learning
Lei Han, Yu Zhang

1190: Active Manifold Learning via Gershgorin Circle Guided Sample Selection
Hongteng Xu, Hongyuan Zha, Ren-Cang Li, Mark A. Davenport

1909: Integrating Features and Similarities: Flexible Models for Heterogeneous Multiview Data
Wenzhao Lian, Piyush Rai, Esther Salazar, Lawrence Carin

2039: Online Boosting Algorithms for Anytime Transfer and Multitask Learning
Boyu Wang, Joelle Pineau

Poster Ads
124: Low-Rank Similarity Metric Learning in High Dimensions
Wei Liu, Cun Mu, Rongrong Ji, Shiqian Ma, John R. Smith, Shih-Fu Chang

185: Transaction Costs-Aware Portfolio Optimization via Fast Löwner-John Ellipsoid Approximation
Weiwei Shen, Jun Wang

289: Shift-Pessimistic Active Learning Using Robust Bias-Aware Prediction
Anqi Liu, Lev Reyzin, Brian D. Ziebart

337: Structured Embedding via Pairwise Relations and Long-Range Interactions in Knowledge Base
Fei Wu, Jun Song, Yi Yang, Xi Li, Zhongfei Zhang, Yueting Zhuang

411: Active Learning by Learning
Wei-Ning Hsu, Hsuan-Tien Lin

506: Convex Batch Mode Active Sampling via α-relative Pearson Divergence
Hanmo Wang, Liang Du, Peng Zhou, Lei Shu, Yi-Dong Shen

529: Fast Gradient Descent for Drifting Least Squares Regression, with Application to Bandits
Nathan Korda, Prashanth L.A., Rémi Munos

2001: Structural Learning with Amortized Inference
Kai-Wei Chang, Shyam Upadhyay, Gourab Kundu, Dan Roth

Texas II-III

AI and the Web 1

Talks
764: An Axiomatic Approach to Link Prediction
Sara Cohen, Aviv Zohar

303: Representation Learning for Aspect Category Detection in Online Reviews
Xinjie Zhou, Xiaojun Wan, Jianguo Xiao

456: Collaborative Topic Ranking: Leveraging Item Meta-Data for Sparsity Reduction
Weilong Yao, Jing He, Hua Wang, Yanchun Zhang, Jie Cao

AAAI-15 Outstanding Paper Honorable Mention
2274: Predicting the Demographics of Twitter Users from Website Traffic Data

Aron Culotta, Nirmal Kumar Ravi, Jennifer Cutler

Poster Ads

1610: Effectively Predicting Whether and When a Topic Will Become Prevalent in a Social Network
Weiwei Liu, Zhi-Hong Deng, Xiuwen Gong, Frank Jiang, Ivor W. Tsang

1685: DynaDiffuse: A Dynamic Diffusion Model for Continuous Time Constrained Influence Maximization
Miao Xie, Qiusong Yang, Qing Wang, Gao Cong, Gerard de Melo

2049: On Information Coverage for Location Category Based Point-of-Interest Recommendation
Xuefeng Chen, Yifeng Zeng, Gao Cong, Shengchao Qin, Yanping Xiang, Yuanshun Dai

1646: Will You "Reconsume" the Near Past? Fast Prediction on Short-Term Reconsumption Behaviors
Jun Chen, Chaokun Wang, Jianmin Wang

1390: Kernel Density Estimation for Text-Based Geolocation
Mans Hulden, Miikka Silfverberg, Jerid Francom

1884: FACES: Diversity-Aware Entity Summarization Using Incremental Hierarchical Conceptual Clustering
Kalpa Gunaratna, Krishnaprasad Thirunarayan, Amit Sheth

1231: Modeling with Node Degree Preservation Can Accurately Find Communities
Di Jin, Zheng Chen, Dongxiao He and Weixiong Zhang

Texas V-VI

Knowledge Representation and Reasoning 2

Talks
Easily Accessible Paper
135: Pearl's Causality in a Logical Setting
Alexander Bochman, Vladimir Lifschitz

990: Projection in the Epistemic Situation Calculus with Belief Conditionals
Christoph Schwering, Gerhard Lakemeyer

1759: An Abstract View on Modularity in Knowledge Representation
Yuliya Lierler, Miroslaw Truszczynski

1970: Belief Revision Games
Nicolas Schwind, Katsumi Inoue, Gauvain Bourgne, Sébastien Konieczny, Pierre Marquis

Poster Ads
1033: Action Language *BC*+: Preliminary Report
Joseph Babb, Joohyung Lee

1545: XPath for DL Ontologies
Egor V. Kostylev, Juan L. Reutter, Domagoj Vrgoc

1638: Ontology Module Extraction via Datalog Reasoning
Ana Armas Romero, Mark Kaminski, Bernardo Cuenca Grau, Ian Horrocks

207: Belief Revision with General Epistemic States
Hua Meng, Hui Kou, Sanjiang Li

Hill Country AB

Planning and Scheduling 2

Talks
1080: This Time the Robot Settles for a Cost: A Quantitative Approach to Temporal Logic Planning with Partial Satisfaction
Morteza Lahijanian, Shaull Almagor, Dror Fried, Lydia E. Kavraki, Moshe Y. Vardi

940: Strong Temporal Planning with Uncontrollable Durations: A State-Space Approach
Alessandro Cimatti, Andrea Micheli, Marco Roveri

399: Robustness in Probabilistic Temporal Planning
Jeb Brooks, Emilia Reed, Alexander Gruver, James C. Boerkoel Jr.

Poster Ads
1123: Resolving Over-Constrained Probabilistic Temporal Problems through Chance Constraint Relaxation
Peng Yu, Cheng Fang, Brian Williams

2158: tBurton: A Divide and Conquer Temporal Planner
David Wang, Brian Williams

470: Optimal Cost Almost-Sure Reachability in POMDPs
Krishnendu Chatterjee, Martin Chmelík, Raghav Gupta, Ayush Kanodia

184: SMT-Based Nonlinear PDDL+ Planning
Daniel Bryce, Sicun Gao, David Musliner, Robert Goldman

190: Crowdsourced Action-Model Acquisition for Planning
Hankz Hankui Zhuo

971: Exploiting Submodular Value Function for Faster Dynamic Sensor Selection
Yash Satsangi, Shimon Whiteson, Frans A. Oliehoek

1264: Transition Constraints for Parallel Planning
Nina Ghanbari Ghooshchi, Majid Namazi, M. A. Hakim Newton, Abdul Sattar

1596: Multi-Objective MDPs with Conditional Lexicographic Reward Preferences
Kyle Hollins Wray, Shlomo Zilberstein, Abdel-Illah Mouaddib

1854: Discretization of Temporal Models with Application to Planning with SMT
Jussi Rintanen

2189: Chance-Constrained Scheduling via Conflict-Directed Risk Allocation
Andrew J. Wang, Brian C. Williams

2273: Learning Hybrid Models with Guarded Transitions
Pedro Santana, Spencer Lane, Eric Timmons, Brian Williams, Carlos Forster

2197: Planning over Multi-Agent Epistemic States: A Classical Planning Approach
Christian Muise, Vaishak Belle, Paolo Felli, Sheila McIlraith, Tim Miller, Adrian R. Pearce, Liz Sonenberg

Big Bend

Natural Language Processing 1

Talks
110: Mining Query Subtopics from Questions in Community Question Answering
Yu Wu, Wei Wu, Zhoujun Li, Ming Zhou

141: Contrastive Unsupervised Word Alignment with Non-Local Features
Yang Liu, Maosong Sun

233: The Utility of Text: The Case of Amicus Briefs and the Supreme Court
Yanchuan Sim, Bryan R. Routledge, Noah A. Smith

Easily Accessible Paper
1106: Multi-Document Summarization Based on Two-Level Sparse Representation Model
He Liu, Hongliang Yu, Zhi-Hong Deng

Poster Ads
613: Ranking with Recursive Neural Networks and Its Application to Multi-Document Summarization
Ziqiang Cao, Furu Wei, Li Dong, Sujian Li, Ming Zhou

652: Question/Answer Matching for CQA System via Combining Lexical and Sequential Information
Yikang Shen, Wenge Rong, Zhiwei Sun, Yuanxin Ouyang, Zhang Xiong

871: Towards Phrase-Based Language Model in Statistical Machine Translation
Jiajun Zhang, Shujie Liu, Mu Li, Ming Zhou**,** Chengqing Zong

966: Automatically Creating a Large Number of New Bilingual Dictionaries
Khang Nhut Lam, Feras Al Tarouti, Jugal Kalita

1675: A Family of Latent Variable Convex Relaxations for IBM Model 2
Andrei Simion, Michael Collins, Clifford Stein

2142: Extracting Adverse Drug Reactions from Social Media
Andrew Yates, Nazli Goharian, Ophir Frieder

Texas VII

Robotics: Science and Systems 2014 Presentations (RSS) 1

Correct High-level Robot Behavior in Environments with Unexpected Events
Kai Weng Wong, Rudiger Ehlers, Hadas Kress-Gazit

Hierarchical Semantic Labeling for Task-Relevant RGB-D Perception
Chenxia Wu, Ian Lenz, Ashutosh Saxena

Open-Vocabulary Object Retrieval
Sergio Guadarrama, Erik Rodner, Kate Saenko, Ning Zhang, Ryan Farrell, Jeff Donahue, Trevor Darrell

Active Reward Learning
Christian Daniel, Malte Viering, Jan Metz, Oliver Kroemer, Jan Peters

Multi-Heuristics A*
Sandip Aine, Siddharth Swaminathan, Venkatraman Narayanan, Victor Hwang, Maxim Likachev

Hill Country CD (IAAI)

IAAI-15: Semantic Web, Knowledge Based Systems, and Ontologies

Emerging: Leveraging Ontologies to Improve Model Generalization Automatically with Online Data Sources
Sasin Janpuangtong, Dylan A. Shell

Emerging: SKILL: A System for Skill Identification and Normalization
Meng Zhao, Faizan Javed, Ferosh Jacob, Matt McNair

Emerging: HACKAR: Helpful Advice for Code Knowledge and Attack Resilience
Ugur Kuter, Mark Burstein, J. Benton, Daniel Bryce, Jordan Thayer, Steve McCoy

3:10 - 3:30

Coffee Break

3:30 - 4:45

AAAI-15 Technical Sessions / Senior Member Blue Sky Talks

Texas I

Machine Learning 3

Talks
387: Probabilistic Attributed Hashing
Mingdong Ou, Peng Cui, Jun Wang, Fei Wang, Wenwu Zhu

555: The Boundary Forest Algorithm for Online Supervised and Unsupervised Learning
Charles Mathy, Nate Derbinsky, José Bento, Jonathan Rosenthal, Jonathan Yedidia

1122: Lazier Than Lazy Greedy
Baharan Mirzasoleiman, Ashwinkumar Badanidiyuru, Amin Karbasi, Jan Vondrák, Andreas Krause

1082: Transfer Feature Representation via Multiple Kernel Learning
Wei Wang, Hao Wang, Chen Zhang, Fanjiang Xu

Poster Ads
621: Relational Stacked Denoising Autoencoder for Tag Recommendation
Hao Wang, Xingjian Shi, Dit-Yan Yeung

648: Sample-Targeted Clinical Trial Adaptation
Ognjen Arandjelovic

672: Low-Rank Multi-View Learning in Matrix Completion for Multi-Label Image Classification
Meng Liu, Yong Luo, Dacheng Tao, Chao Xu, Yonggang Wen

696: Multi-Objective Reinforcement Learning with Continuous Pareto Frontier Approximation
Matteo Pirotta, Simone Parisi, Marcello Restelli

725: Efficient Active Learning of Halfspaces via Query Synthesis
Ibrahim Alabdulmohsin, Xin Gao, Xiangliang Zhang

845: V-MIN: Efficient Reinforcement Learning through Demonstrations and Relaxed Reward Demands
David Martínez, Guillem Alenyà, Carme Torras

1994: Leveraging Features and Networks for Probabilistic Tensor Decomposition
Piyush Rai, Yingjian Wang, Lawrence Carin

Texas II-III

AI and the Web 2

Talks
353: TrustSVD: Collaborative Filtering with Both the Explicit and Implicit Influence of User Trust and of Item Ratings
Guibing Guo, Jie Zhang, Neil Yorke-Smith

627: Learning User-Specific Latent Influence and Susceptibility from Information Cascades
Yongqing Wang, Huawei Shen, Shenghua Liu, Xueqi Cheng

882: Causal Inference via Sparse Additive Models with Application to Online Advertising
Wei Sun, Pengyuan Wang, Dawei Yin, Jian Yang, Yi Chang

1614: Acquiring Speech Transcriptions Using Mismatched Crowdsourcing
Preethi Jyothi, Mark Hasegawa-Johnson

Poster Ads
87: Modeling Status Theory in Trust Prediction
Ying Wang, Xin Wang, Jiliang Tang, Wanli Zuo, Guoyong Cai

241: On the Scalable Learning of Stochastic Blockmodel
Bo Yang, Xuehua Zhao

700: Bayesian Approach to Modeling and Detecting Communities in Signed Network
Bo Yang, Xuehua Zhao, Xueyan Liu

720: Learning Entity and Relation Embeddings for Knowledge Graph Completion
Yankai Lin, Zhiyuan Liu, Maosong Sun, Yang Liu, Xuan Zhu

749: Predicting Peer-to-Peer Loan Rates Using Bayesian Non-Linear Regression
Zsolt Bitvai, Trevor Cohn

1757: An EBMC-Based Approach to Selecting Types for Entity Filtering
Jiwei Ding, Wentao Ding, Wei Hu, Yuzhong Qu

1527: Relating Romanized Comments to News Articles by Inferring Multi-*Glyphic* Topical Correspondence
Goutham Tholpadi, Mrinal Kanti Das, Trapit Bansal, Chiranjib Bhattacharyya

Texas V-VI

Knowledge Representation and Reasoning 3

Talks
221: *asprin:* Customizing Answer Set Preferences without a Headache
Gerhard Brewka, James Delgrande, Javier Romero, Torsten Schaub

1718: SMT-Based Validation of Timed Failure Propagation Graphs
Marco Bozzano, Alessandro Cimatti, Marco Gario, Andrea Micheli

2110: Interactive Query-Based Debugging of ASP Programs
Kostyantyn Shchekotykhin

2109: Stable Model Counting and Its Application in Probabilistic Logic Programming
Rehan Abdul Aziz, Geoffrey Chu, Christian Muise, Peter J. Stuckey

Poster Ads
287: Exploring the $KD45_n$ Property of a Kripke Model after the Execution of an Action Sequence
Tran Cao Son, Enrico Pontelli, Chitta Baral, Gregory Gelfond

300: Parallelized Hitting Set Computation for Model-Based Diagnosis
Dietmar Jannach, Thomas Schmitz, Kostyantyn Shchekotykhin

682: Verifying and Synthesising Multi-Agent Systems against One-Goal Strategy Logic Specifications
Petr Čermák, Alessio Lomuscio, Aniello Murano

707: Tractable Interval Temporal Propositional and Description Logics
Alessandro Artale, Roman Kontchakov, Vladislav Ryzhikov, Michael Zakharyaschev

906: Towards Tractable and Practical ABox Abduction over Inconsistent Description Logic Ontologies
Jianfeng Du, Kewen Wang, Yi-Dong Shen

Hill Country AB

Multiagent Systems 1

Talks
290: Efficient Task Sub-Delegation for Crowdsourcing
Han Yu, Chunyan Miao, Zhiqi Shen, Cyril Leung, Yiqiang Chen, Qiang Yang

Easily Accessible Paper
815: Multi-Agent Pathfinding as a Combinatorial Auction
Ofra Amir, Guni Sharon, Roni Stern

Easily Accessible Paper
1967: On Fairness in Decision-Making under Uncertainty: Definitions, Computation, and Comparison
Chongjie Zhang, Julie A. Shah

877: Finding a Collective Set of Items: From Proportional Multirepresentation to Group Recommendation
Piotr Skowron, Piotr Faliszewski, Jérôme Lang

Poster Ads
554: Cupid: Commitments in Relational Algebra
Amit K. Chopra, Munindar P. Singh

2482: Verification of Relational Multiagent Systems with Data Types
Diego Calvanese, Marco Montali, Giorgio Delzanno

894: Distributing Coalition Value Calculations to Coalition Members
Luke Riley, Katie Atkinson, Paul E. Dunne, Terry R. Payne

1868: Matching with Dynamic Ordinal Preferences
Hadi Hosseini, Kate Larson, Robin Cohen

2046: Cooperating with Unknown Teammates in Complex Domains: A Robot Soccer Case Study of Ad Hoc Teamwork
Samuel Barrett, Peter Stone

Big Bend

Machine Learning 4

Talks
806: An Adaptive Gradient Method for Online AUC Maximization
Yi Ding, Peilin Zhao, Steven C.H. Hoi, Yew Soon Ong

1253: Kernelized Online Imbalanced Learning with Fixed Budgets
Junjie Hu, Haiqin Yang, Irwin King, Michael R. Lyu, Anthony Man-Cho So

1677: High-Performance Distributed ML at Scale through Parameter Server Consistency Models
Wei Dai, Abhimanu Kumar, Jinliang Wei, Qirong Ho, Garth Gibson, Eric P. Xing

Poster Ads
8: Unidimensional Clustering of Discrete Data Using Latent Tree Models

April Hua Liu, Leonard K. M. Poon, Nevin L. Zhang

38: SoF: Soft-Cluster Matrix Factorization for Probabilistic Clustering
Han Zhao, Pascal Poupart, Yongfeng Zhang, Martin Lysy

149: Robust Subspace Clustering via Thresholding Ridge Regression
Xi Peng, Zhang Yi, Huajin Tang

203: Detecting and Tracking Concept Class Drift and Emergence in Non-Stationary Fast Data Streams
Brandon S. Parker, Latifur Khan

215: 10,000+ Times Accelerated Robust Subset Selection (ARSS)
Feiyun Zhu, Bin Fan, Xinliang Zhu, Ying Wang, Shiming Xiang, Chunhong Pan

307: Constrained NMF-Based Multi-View Clustering on Unmapped Data
Xianchao Zhang, Linlin Zong, Xinyue Liu, Hong Yu

339: The Queue Method: Handling Delay, Heuristics, Prior Data, and Evaluation in Bandits
Travis Mandel, Yun-En Liu, Emma Brunskill, Zoran Popović

370: Maximin Separation Probability Clustering
Gao Huang, Jianwen Zhang, Shiji Song, Zheng Chen

467: Learning Robust Locality Preserving Projection via p-Order Minimization
Hua Wang, Feiping Nie, Heng Huang

583: Coupled Interdependent Attribute Analysis on Mixed Data
Can Wang, Chi-Hung Chi, Wei Zhou, Raymond Wong

738: Online Bandit Learning for a Special Class of Non-Convex Losses
Lijun Zhang, Tianbao Yang, Rong Jin, Zhi-Hua Zhou

1007: Budgeted Prediction with Expert Advice
Kareem Amin, Satyen Kale, Gerald Tesauro, Deepak Turaga

1043: Large-Scale Multi-View Spectral Clustering via Bipartite Graph
Yeqing Li, Feiping Nie, Heng Huang, Junzhou Huang

1575: A Convex Formulation for Spectral Shrunk Clustering
Xiaojun Chang, Feiping Nie, Zhigang Ma, Yi Yang, Xiaofang Zhou

2524: The Dynamic Chinese Restaurant Process via Birth and Death Processes
Rui Huang, Fengyuan Zhu, Pheng-Ann Heng

Texas VII

Senior Member Blue Sky Talks Session 1

12: Speech Adaptation in Extended Ambient Intelligence Environments
Bonnie J. Dorr, Lucian Galescu, Ian Perera, Kristy Hollingshead-Seitz, David Atkinson, Micah Clark, William Clancey, Yorick Wilks, Eric Fosler-Lussier

26: Impact of Modeling Languages on the Theory and Practice in Planning Research
Jussi Rintanen

2: Blended Planning and Acting: Preliminary Approach, Research Challenges
Dana S. Nau, Malik Ghallab, Paolo Traverso

4: Building Strong Semi-Autonomous Systems
Shlomo Zilberstein

28: Steering Evolution Strategically: Computational Game Theory and Opponent Exploitation for Treatment Planning, Drug Design, and Synthetic Biology
Tuomas Sandholm

Hill Country CD (IAAI)

IAAI-15: E-Commerce & Social Media

Deployed: Planned Protest Modeling in News and Social Media
Sathappan Muthiah, Bert Huang, Jaime Arredondo, David Mares, Lise Getoor, Graham Katz, Naren Ramakrishnan

Deployed: Position Assignment on an Enterprise Level Using Combinatorial Optimization
Leonard Kinnaird-Heether, Chris Dorman

Foothills I, 17th Floor

4:45 - 5:45

AAAI/SIGAI Job Market Session

As an extension of the AAAI / ACM SIGAI Job Market Electronic Bulletin Board, AAAI job seekers and job advertisers are invited to attend a meet and greet session during the long break just prior to the Shakey Celebration.

Texas Ballroom

5:45 - 7:15

AAAI-15 Shakey Celebration

The Shakey Celebration will include a panel with Ed Feigenbaum, Peter Hart, and Nils Nilsson, along with other highlights of this historic project.

Zilker Ballroom

7:15 - 8:45

AAAI-15 Poster / Demo Reception 1

The Poster / Demo Reception will include technical poster presentations by authors of all papers presented today as poster ads, as well as the demos listed below. Doctoral

Consortium posters will also be presented (listed below), and robotics exhibitions, Virtual Agents demos ((listed below), and RoboCup exhibitions will be available.

AAAI-15 Technical Demos
37: Bottom-Up Demand Response by Following Local Energy Generation Voluntarily
Tobias Linnenberg, Alexander Fay, Michael Kaisers

70: The Network Data Repository with Interactive Graph Analytics and Visualization
Ryan A. Rossi, Nesreen K. Ahmed

1277: World WordNet Database Structure: An Efficient Schema for Storing
Information of WordNets of the World
Hanumant Redkar, Sudha Bhingardive, Diptesh Kanojia, Pushpak Bhattacharyya

1690: Towards Cognitive Automation of Data Science
Alain Biem, Maria A. Butrico, Mark D. Feblowitz, Tim Klinger, Yuri Malitsky, Kenney
Ng, Adam Perer, Chandra Reddy, Anton V. Riabov, Horst Samulowitz, Daby Sow,
Gerald Tesauro, Deepak Turaga

1707: VecLP: A Realtime Video Recommendation System for Live TV Programs
Sheng Gao, Dai Zhang, Honggang Zhang, Jianxin Liao, Chao Huang, Yongsheng
Zhang, Jun Guo

1910: DeepTutor: An Effective, Online Intelligent Tutoring System that Promotes
Deep Learning
Vasile Rus, Nobal B. Niraula, Rajendra Banjade

2483: Cognitive Master Teacher
Raghu Krishnapuram, Luis A. Lastras, Satya Nitta

AAAI-15 Doctoral Consortium Abstract Posters
Modeling Eye Movements when Reading Microblogs
Maria Barrett, Anders Søgaard

Exploiting the Structure of Distributed Constraint Optimization Problems
Ferdinando Fioretto

Realistic Assumptions for Attacks on Elections
Zack Fitzsimmons

Social Hierarchical Learning
Bradley Hayes

Multivariate Conditional Anomaly Detection and Its Clinical Application
Charmgil Hong, Milos Hauskrecht

Probabilistic Planning with Risk-Sensitive Criterion
Ping Hou

Entity Resolution in a Big Data Framework
Mayank Kejriwal

Non-Classical Planning for Robotic Applications

Scott Kiesel

Transfer Learning-Based Co-Run Scheduling for Heterogeneous Datacenters
Wei Kuang, Laura E. Brown, Zhenlin Wang

HVAC-Aware Occupancy Scheduling (Extended Abstract)
Boon-Ping Lim

Scalable Agent Modeling for Large Multiagent Systems
Carrie Rebhuhn

Explaining Answer Set Programming in Argumentative Terms
Claudia Schulz

Optimal Multi-Agent Pathfinding Algorithms
Guni Sharon

Multi-Agent Team Formation: Solving Complex Problems by Aggregating Opinions
Leandro Soriano Marcolino

Scaling-Up Inference in Markov Logic
Deepak Venugopal

Risk-Aware Scheduling throughout Planning and Execution
Andrew J. Wang

Virtual Agents Demos
Social Simulation with Virtual Agents
Arnav Jhala

Cerebella: Automatic Generation of Nonverbal Behavior for Virtual Humans
Margot Lhommet, Yuyu Xu, Stacy Marsella

Scheherazade: Crowd-Powered Interactive Narrative Generation
Boyang Li, Mark O. Riedl

SimSensei Demonstration: A Perceptive Virtual Human Interviewer for Healthcare Applications
Louis-Philippe Morency, Giota Stratou, David DeVault, Arno Hartholt, Margaux Lhommet, Gale Lucas, Fabrizio Morbini, Kallirroi Georgila, Stefan Scherer, Jonathan Gratch, Stacy Marsella, David Traum, Albert Rizzo

LOL — Laugh Out Loud
Florian Pecune, Beatrice Biancardi, Yu Ding, Catherine Pelachaud, Maurizio Mancini, Giovanna Varni, Antonio Camurri, Gualtiero Volpe

Using Social Relationships to Control Narrative Generation

Julie Porteous, Fred Charles, Marc Cavazza

Interactive Narrative Planning in *The Best Laid Plans*
Stephen G. Ware, R. Michael Young, Phillip Wright, Christian Stith

Wednesday, January 28

Foothills II, 17th Floor

7:45-8:45

Women's Mentoring Breakfast

9:00 - 9:15

AAAI-15 Senior Member Blue Sky Award Talk / What's Hot Talks

Zilker Ballroom

Senior Member Blue Sky Award Talk 2

Intelligent Agents for Rehabilitation and Care of Disabled and Chronic Patients
Sarit Kraus

What's Hot Talks 3

Texas Ballroom I

What's Hot in the Planning Competition
Stefan Edelkamp
(Abstract: BDDs Strike Back (in AI Planning) by Stefan Edelkamp, Peter Kissmann, Álvaro Torralba)

Texas Ballroom II-III

What's Hot in Human Factors in Computing Systems (CHI)
Wei Li
(Abstract: What Is Hot in CHI by Wei Li)

9:20 - 10:35

AAAI-15 Technical Sessions / Classic Paper Award Talk / Robotics Student Fellowship Talks

Texas I

Machine Learning 5

Talks
893: Compress and Control
Joel Veness, Marc G. Bellemare, Marcus Hutter, Alvin Chua, Guillaume Desjardins

907: Expressing Arbitrary Reward Functions as Potential-Based Advice
Anna Harutyunyan, Sam Devlin, Peter Vrancx, Ann Nowé

1894: High Confidence Off-Policy Evaluation

Philip S. Thomas, Georgios Theocharous, Mohammad Ghavamzadeh

1937: Improving Approximate Value Iteration with Complex Returns by Bounding
Robert Wright, Xingye Qiao, Lei Yu, Steven Loscalzo

Poster Ads
1209: Unsupervised Cross-Domain Transfer in Policy Gradient Reinforcement Learning via Manifold Alignment
Haitham Bou Ammar, Eric Eaton, Paul Ruvolo, Matthew E. Taylor

1110: Optimal Column Subset Selection by A-Star Search
Hiromasa Arai, Crystal Maung, Haim Schweitzer

1958: Policy Tree: Adaptive Representation for Policy Gradient
Ujjwal Das Gupta, Erik Talvitie, Michael Bowling

1015: Don't Fall for Tuning Parameters: Tuning-Free Variable Selection in High Dimensions with the TREX
Johannes Lederer, Christian J. Müller

970: A Generalized Reduced Linear Program for Markov Decision Processes
Chandrashekar Lakshminarayanan, Shalabh Bhatnagar

1093: Discriminative Feature Grouping
Lei Han, Yu Zhang

1528: Exploiting Task-Feature Co-Clusters in Multi-Task Learning
Linli Xu, Aiqing Huang, Jianhui Chen, Enhong Chen

Texas II-III

AI and the Web 3

Talks
209: Content-Based Collaborative Filtering for News Topic Recommendation
Zhongqi Lu, Zhicheng Dou, Jianxun Lian, Xing Xie, Qiang Yang

Easily Accessible Paper
1017: Are Features Equally Representative? A Feature-Centric Recommendation
Chenyi Zhang, Ke Wang, Ee-peng Lim, Qinneng Xu, Jianling Sun, Hongkun Yu

1230: COT: Contextual Operating Tensor for Context-Aware Recommender Systems
Qiang Liu, Shu Wu and Liang Wang

1644: A Personalized Interest-Forgetting Markov Model for Recommendations
Jun Chen, Chaokun Wang, Jianmin Wang

Poster Ads
234: Content-Aware Point of Interest Recommendation on Location-Based Social Networks
Huiji Gao, Jiliang Tang, Xia Hu, Huan Liu

267: Leveraging Social Foci for Information Seeking in Social Media
Suhas Ranganath, Jiliang Tang, Xia Hu, Hari Sundaram, Huan Liu

1395: Extended Property Paths: Writing More SPARQL Queries in a Succinct Way
Valeria Fionda, Giuseppe Pirrò, Mariano P. Consens

1739: Uniform Interpolation and Forgetting for *ALC* Ontologies with ABoxes
Patrick Koopmann, Renate A. Schmidt

1935: Lower and Upper Bounds for SPARQL Queries over OWL Ontologies
Birte Glimm, Yevgeny Kazakov, Ilianna Kollia, Giorgos Stamou

2028: Consistent Knowledge Discovery from Evolving Ontologies
Freddy Lécué and Jeff Z. Pan

2: Using Description Logics for RDF Constraint Checking and Closed-World Recognition
Peter F. Patel-Schneider

Texas V-VI

Knowledge Representation and Reasoning 4

Talks
932: Incremental Update of Datalog Materialisation: The Backward/Forward Algorithm
Boris Motik, Yavor Nenov, Robert Piro, Ian Horrocks

1225: Instance-Driven Ontology Evolution in DL-Lite
Zhe Wang, Kewen Wang, Zhiqiang Zhuang, Guilin Qi

1456: Existential Rule Languages with Finite Chase: Complexity and Expressiveness
Heng Zhang, Yan Zhang, Jia-Huai You

1584: From Classical to Consistent Query Answering under Existential Rules
Thomas Lukasiewicz, Maria Vanina Martinez, Andreas Pieris, Gerardo I. Simari

1659: Solving and Explaining Analogy Questions Using Semantic Networks
Adrian Boteanu, Sonia Chernova

Hill Country AB

Reasoning under Uncertainty 1

Talks
1588: Bayesian Networks Specified Using Propositional and Relational Constructs: Combined, Data, and Domain Complexity
Fabio Gagliardi Cozman, Denis Deratani Mauá

Easily Accessible Paper
709: Learning Relational Sum-Product Networks
Aniruddh Nath, Pedro Domingos

2116: Lifted Probabilistic Inference for Asymmetric Graphical Models
Guy Van den Broeck, Mathias Niepert

1408: Linear-Time Gibbs Sampling in Piecewise Graphical Models
Hadi Mohasel Afshar, Scott Sanner, Ehsan Abbasnejad

Poster Ads
1928: Recovering Causal Effects from Selection Bias
Elias Bareinboim, Jin Tian

2009: Multi-Source Domain Adaptation: A Causal View
Kun Zhang, Mingming Gong, Bernhard Schölkopf

1372: On the Decreasing Power of Kernel and Distance Based Nonparametric
Hypothesis Tests in High Dimensions
Aaditya Ramdas, Sashank J. Reddi, Barnabás Póczos, Aarti Singh, Larry Wasserman

510: Submodular Surrogates for Value of Information
Yuxin Chen, Shervin Javdani, Amin Karbasi, J. Andrew Bagnell, Siddhartha Srinivasa,
Andreas Krause

1163: Value of Information Based on Decision Robustness
Suming Chen, Arthur Choi, Adnan Darwiche

1744: Nonstationary Gaussian Process Regression for Evaluating Clinical Laboratory
Test Sampling Strategies
Thomas A. Lasko

1317: Loss-Calibrated Monte Carlo Action Selection
Ehsan Abbasnejad, Justin Domke, Scott Sanner

Big Bend

Machine Learning 7

Talks
1109: Pathway Graphical Lasso
Maxim Grechkin, Maryam Fazel, Daniela Witten, Su-In Lee

Easily Accessible Paper
1404: PD Disease State Assessment in Naturalistic Environments Using Deep
Learning
Nils Yannick Hammerla, James M. Fisher, Peter Andras, Lynn Rochester, Richard
Walker, Thomas Plötz

2013: Clustering Longitudinal Clinical Marker Trajectories from Electronic Health
Data: Applications to Phenotyping and Endotype Discovery
Peter Schulam, Fredrick Wigley, Suchi Saria

Poster Ads
361: The Hybrid Nested/Hierarchical Dirichlet Process and Its Application to Topic
Modeling with Word Differentiation
Tengfei Ma, Issei Sato, Hiroshi Nakagawa

767: Collaborative Filtering with Localised Ranking
Charanpal Dhanjal, Stéphan Clémençon, Romaric Gaudel

819: Using Machine Teaching to Identify Optimal Training-Set Attacks on Machine Learners
Shike Mei, Xiaojin Zhu

842: Mining User Interests from Personal Photos
Pengtao Xie, Yulong Pei, Yuan Xie, Eric Xing

951: Self-Paced Learning for Matrix Factorization
Qian Zhao, Deyu Meng, Lu Jiang, Qi Xie, Zongben Xu, Alexander G. Hauptmann

1348: Detecting Change Points in the Large-Scale Structure of Evolving Networks
Leto Peel, Aaron Clauset

1467: Deep Modeling Complex Couplings within Financial Markets
Wei Cao, Liang Hu, Longbing Cao

1642: A Multivariate Timeseries Modeling Approach to Severity of Illness Assessment and Forecasting in ICU with Sparse, Heterogeneous Clinical Data
Marzyeh Ghassemi, Marco A. F. Pimentel, Tristan Naumann, Thomas Brennan, David A. Clifton, Peter Szolovits, Mengling Feng

2105: Spectral Label Refinement for Noisy and Missing Text Labels
Yangqiu Song, Chenguang Wang, Ming Zhang, Hailong Sun, Qiang Yang

2314: On the Equivalence of Linear Discriminant Analysis and Least Squares
Kibok Lee, Junmo Kim

2201: Inertial Hidden Markov Models: Modeling Change in Multivariate Time Series
George D. Montañez, Saeed Amizadeh, Nikolay Laptev

2340: R1SVM: A Randomised Nonlinear Approach to Large-Scale Anomaly Detection
Sarah M. Erfani, Mahsa Baktashmotlagh, Sutharshan Rajasegarar, Shanika Karunasekera, Chris Leckie

2449: Outlier-Robust Convex Segmentation
Itamar Katz, Koby Crammer

1951: Aligning Mixed Manifolds
Thomas Boucher, Clifton J. Carey, Sridhar Mahadevan, Melinda Darby Dyar

2195: A Regularized Linear Dynamical System Framework for Multivariate Time Series Analysis
Zitao Liu, Milos Hauskrecht

Texas VII

Classic Paper Award Talk / Robotics Student Fellowship Talks

Classic Paper Award Talk

Statistical Parsing with a Context-Free Grammar and Word Statistics
Eugene Charniak

Robotics Student Fellowship Talks 1

Task-Oriented Planning for Manipulating Articulated Mechanisms Under Model Uncertainty
Venkatraman Narayanan

Learning the State of the World: Object-based State Estimation for Mobile-Manipulation Robots
Lawson L.S. Wong

Time-Optimal Learning, Exploration and Control for Mobile Robots in (Partially) Known Environments
Vladislav Nenchev

Plan Execution Monitoring through Detection of Unmet Expectations about Action Outcomes
Juan Pablo Mendoza

Representation Learning for Robotics
Rico Jonschkowski

A Divide and Conquer Approach to Control Complex Continuous State Dynamic Systems using Hierarchical Reinforcement Learning
Sean Harris

Hill Country CD

IAAI-15: Crowdsouring and NLP

Emerging: Aggregating User Input in Ecology Citizen Science Projects
Greg Hines, Alexandra Swanson, Margaret Kosmala, Chris Lintott

Emerging: Using Qualitative Spatial Logic for Validating Crowd-Sourced Geospatial Data
Heshan Du, Hai Nguyen, Natasha Alechina, Brian Logan, Michael Jackson, John Goodwin

Emerging: Named Entity Recognition in Travel-Related Search Queries
Brooke Cowan, Sven Zethelius, Brittany Luk, Teodora Baras, Prachi Ukarde, Daodao Zhang

10:35 - 10:55

Coffee Break

10:55 - 12:10

AAAI-15 Technical Sessions / Senior Member Blue Sky Talks

Texas I

Machine Learning 6

315: Obtaining Well Calibrated Probabilities Using Bayesian Binning
Mahdi Pakdaman Naeini, Gregory F. Cooper, Milos Hauskrecht

Easily Accessible Paper
820: Modelling Class Noise with Symmetric and Asymmetric Distributions
Jun Du, Zhihua Cai

2396: Bayesian Model Averaging Naive Bayes (BMA-NB): Averaging over an Exponential Number of Feature Models in Linear Time
Ga Wu, Scott Sanner, Rodrigo F. S. C. Oliveira

2291: Improving Multi-Step Prediction of Learned Time Series Models
Arun Venkatraman, Martial Hebert, J. Andrew Bagnell

Poster Ads
41: A Closed Form Solution to Multi-View Low-Rank Regression
Shuai Zheng, Xiao Cai, Chris Ding, Feiping Nie, Heng Huang

1051: Tensor-Variate Restricted Boltzmann Machines
Tu Dinh Nguyen, Truyen Tran, Dinh Phung, Svetha Venkatesh

1077: Structured Sparsity with Group-Graph Regularization
Xin-Yu Dai, Jian-Bing Zhang, Shu-Jian Huang, Jia-Jun Chen, Zhi-Hua Zhou

1532: Exact Recoverability of Robust PCA via Outlier Pursuit with Tight Recovery Bounds
Hongyang Zhang, Zhouchen Lin, Chao Zhang, Edward Y. Chang

1655: Personalized Tag Recommendation through Nonlinear Tensor Factorization Using Gaussian Kernel
Xiaomin Fang, Rong Pan, Guoxiang Cao, Xiuqiang He, Wenyuan Dai

553: Embedded Unsupervised Feature Selection
Suhang Wang, Jiliang Tang, Huan Liu

559: Optimal Estimation of Multivariate ARMA Models
Martha White, Junfeng Wen, Michael Bowling, Dale Schuurmans

855: A Nonconvex Relaxation Approach for Rank Minimization Problems
Xiaowei Zhong, Linli Xu, Yitan Li, Zhiyuan Liu, Enhong Chen

Texas II-III

AI and the Web 4

Talks
541: A New Granger Causal Model for Influence Evolution in Dynamic Social Networks: The Case of DBLP
Belkacem Chikhaoui, Mauricio Chiazzaro, Shengrui Wang

1385: Sampling Representative Users from Large Social Networks
Jie Tang, Chenhui Zhang, Keke Cai, Li Zhang, Zhong Su

2153: Incorporating Assortativity and Degree Dependence into Scalable Network Models
Stephen Mussmann, John Moore, Joseph J. Pfeiffer III, Jennifer Neville

571: Online Bayesian Models for Personal Analytics in Social Media
Svitlana Volkova, Benjamin Van Durme

Poster Ads
934: On the Impossibility of Convex Inference in Human Computation
Nihar B. Shah, Dengyong Zhou

1028: Crowdsourcing Complex Workflows under Budget Constraints
Long Tran-Thanh, Trung Dong Huynh, Avi Rosenfeld, Sarvapali D. Ramchurn, Nicholas R. Jennings

1228: Novel Mechanisms for Online Crowdsourcing with Unreliable, Strategic Agents
Praphul Chandra, Yadati Narahari, Debmalya Mandal, Prasenjit Dey

912: Minimizing User Involvement for Accurate Ontology Matching Problems
Anika Schumann, Freddy Lecue

507: Robust Image Sentiment Analysis Using Progressively Trained and Domain Transferred Deep Networks
Quanzeng You, Jiebo Luo, Hailin Jin, Jianchao Yang

205: Perceiving Group Themes from Collective Social and Behavioral Information
Peng Cui, Tianyang Zhang, Fei Wang, Peng He

1104: Exploring Key Concept Paraphrasing Based on Pivot Language Translation for Question Retrieval
Wei-Nan Zhang, Zhao-Yan Ming, Yu Zhang, Ting Liu, Tat-Seng Chua

Texas V-VI

Heuristic Search and Optimization 1

Talks
580: Recursive Best-First Search with Bounded Overhead
Matthew Hatem, Scott Kiesel, Wheeler Ruml

1877: Limitations of Front-to-End Bidirectional Heuristic Search
Joseph K. Barker, Richard E. Korf

2288: Value-Directed Compression of Large-Scale Assignment Problems
Tyler Lu, Craig Boutilier

Poster Ads
1420: Algorithm Selection via Ranking
Richard J. Oentaryo, Stephanus Daniel Handoko, Hoong Chuin Lau

697: Solving Hard Stable Matching Problems via Local Search and Cooperative Parallelization
Danny Munera, Daniel Diaz, Salvador Abreu, Francesca Rossi, Vijay Saraswat, Philippe Codognet

827: Optimizing the CVaR via Sampling
Aviv Tamar, Yonatan Glassner, Shie Mannor

457: A Mathematical Programming-Based Approach to Determining Objective Functions from Qualitative and Subjective Comparisons
Takayuki Yoshizumi

790: Lagrangian Decomposition Algorithm for Allocating Marketing Channels
Daisuke Hatano, Takuro Fukunaga, Takanori Maehara, Ken-ichi Kawarabayashi

713: An Efficient Forest-Based Tabu Search Algorithm for the Split-Delivery Vehicle Routing Problem
Zizhen Zhang, Huang He, Zhixing Luo, Hu Qin, Songshan Guo

748: Multi-Agent Path Finding on Strongly Biconnected Graphs
Adi Botea, Pavel Surynek

44: Two Weighting Local Search for Minimum Vertex Cover
Shaowei Cai, Jinkun Lin, Kaile Su

211: Exploiting Variable Associations to Configure Efficient Local Search in Large-Scale Set Partitioning Problems
Shunji Umetani

758: Improved Local Search for Binary Matrix Factorization
Seyed Hamid Mirisaee, Eric Gaussier, Alexandre Termier

1433: Stochastic Local Search for Satisfiability Modulo Theories.
Andreas Fröhlich, Armin Biere, Christoph M. Wintersteiger, Youssef Hamadi

88: TDS+: Improving Temperature Discovery Search
Yeqin Zhang, Martin Müller

Hill Country AB

Reasoning under Uncertainty 2

Talks
1594: An Improved Lower Bound for Bayesian Network Structure Learning
Xiannian Fan, Changhe Yuan

1965: Spectral Learning of Predictive State Representations with Insufficient Statistics
Alex Kulesza, Nan Jiang, Satinder Singh

504: Knowledge-Based Probabilistic Logic Learning
Phillip Odom, Tushar Khot, Reid Porter, Sriraam Natarajan

1502: Learning Relational Kalman Filtering
Jaesik Choi, Eyal Amir, Tianfang Xu, Albert J. Valocchi

Poster Ads

1864: An Exact Algorithm for Solving Most Relevant Explanation in Bayesian Networks
Xiaoyuan Zhu, Changhe Yuan

793: Support Consistency of Direct Sparse-Change Learning in Markov Networks
Song Liu, Taiji Suzuki, Masashi Sugiyama

195: Concurrent PAC RL
Zhaohan Daniel Guo, Emma Brunskill

1780: Nonparametric Scoring Rules
Erik Zawadzki, Sébastien Lahaie

1200: Probabilistic Graphical Models for Boosting Cardinal and Ordinal Peer Grading in MOOCs
Fei Mi, Dit-Yan Yeung

432: Learning to Reject Sequential Importance Steps for Continuous-Time Bayesian Networks
Jeremy C. Weiss, Sriraam Natarajan, C. David Page

1762: Representing Aggregators in Relational Probabilistic Models
David Buchman, David Poole

Big Bend

Game Theory and Economic Paradigms 2

Talks
1006: On a Competitive Secretary Problem
Anna Karlin, Eric Lei

1245: Computing Nash Equilibrium in Interdependent Defense Games
Hau Chan, Luis E. Ortiz

1567: Combining Compact Representation and Incremental Generation in Large Games with Sequential Strategies
Branislav Bosansky, Albert Xin Jiang, Milind Tambe, Christopher Kiekintveld

437: A Graphical Representation for Games in Partition Function Form
Oskar Skibski, Tomasz P. Michalak, Yuko Sakurai, Michael Wooldridge, Makoto Yokoo

Poster Ads
21: Congestion Games with Distance-Based Strict Uncertainty
Reshef Meir, David Parkes

560: Efficient Computation of Semivalues for Game-Theoretic Network Centrality
Piotr L. Szczepański, Mateusz K. Tarkowski, Tomasz P. Michalak, Paul Harrenstein, Michael Wooldridge

771: Optimal Machine Strategies to Commit to in Two-Person Repeated Games
Song Zuo, Pingzhong Tang

1551: Security Games with Protection Externalities

Jiarui Gan, Bo An, Yevgeniy Vorobeychik

938: Online Learning and Profit Maximization from Revealed Preferences
Kareem Amin, Rachel Cummings, Lili Dworkin, Michael Kearns, Aaron Roth

982: Learning Valuation Distributions from Partial Observation
Avrim Blum, Yishay Mansour, Jamie Morgenstern

1546: Sequence-Form Algorithm for Computing Stackelberg Equilibria in Extensive-Form Games
Branislav Bosansky, Jirí Cermák

Texas VII

Senior Member Blue Sky Talks 2

10: Towards a Programmer's Apprentice (Again)
Howard Shrobe, Boris Katz, Randall Davis

5: Conducting Neuroscience to Guide the Development of AI
Jeffrey Mark Siskind

11: Machanism Learning with Mechanism Induced Data
Tie-Yan Liu, Wei Chen, Tao Qin

14: Challenges in Resource and Cost Allocation
Toby Walsh

21: Explaining Watson: Polymath Style
Wlodek Zadrozny, Valeria de Paiva, Lawrence S. Moss

Hill Country CD

IAAI-15: Challenge Paper Session

Challenge: The Winograd Schema Challenge: Evaluating Progress in Commonsense Reasoning
Leora Morgenstern, Charles L. Ortiz. Jr.

Challenge: Elementary School Science and Math Tests as a Driver for AI: Take the Aristo Challenge!
Peter Clark

Challenge: Time-Varying Clusters in Large-Scale Flow Cytometry
Jeremy Hyrkas, Daniel Halperin, Bill Howe

12:10 - 1:40

Lunch Break / Student Abstract Talks / AAAI Lunch with a Fellow Program

Texas I

Student Abstract Talks

Poster Ads

2538: Representation Discovery for MDPs Using Bisimulation Metrics
Sherry Shanshan Ruan, Gheorghe Comanici, Prakash Panangaden, Doina Precup

2580: "Is It Rectangular?" Using I Spy as an Interactive, Game-Based Approach to Multimodal Robot Learning
Natalie Paige Parde, Michalis Papakostas, Konstantinos Tsiakas, Rodney D. Nielsen

2588: Multimedia Data for the Visually Impaired
Niket Tandon, Shekhar Sharma, Tanima Makkad

2616: Combining Machine Learning and Crowdsourcing for Better Understanding Commodity Reviews
Heting Wu, Hailong Sun, Yili Fang, Kefan Hu, Yongqing Xie, Yangqiu Song, Xudong Liu

2563: Just-in-Time Hierarchical Constraint Decomposition
Valentin Mayer-Eichberger

2596: Active Learning for Informative Projection Retrieval
Madalina Fiterau, Artur Dubrawski

2552: Global Policy Construction in Modular Reinforcement Learning
Ruohan Zhang, Zhao Song, Dana H. Ballard

2561: Handling Uncertainty in Answer Set Programming
Yi Wang, Joohyung Lee

2565: Query Abduction for *ELH* Ontologies
Mahsa Chitsaz, Zhe Wang, Kewen Wang

2592: Planning with Numeric Timed Initial Fluents
Chiara Piacentini, Maria Fox, Derek Long

2593: A New Computational Intelligence Model for Long-Term Prediction of Solar and Geomagnetic Activity
Mahboobeh Parsapoor, John Brooke, Bertil Svensson

2602: Every Team Deserves a Second Chance: Identifying When Things Go Wrong
Vaishnavh Nagarajan, Leandro Soriano Marcolino, Milind Tambe

2604: Touchless Telerobotic Surgery - Is It Possible at All?
Tian Zhou, Maria Eugenia Cabrera, Juan Pablo Wachs

2540: GEF: A Self-Programming Robot Using Grammatical Evolution
Charles Peabody, Jennifer Seitzer

2557: Language Independent Feature Extractor
Young-Seob Jeong, Ho-Jin Choi

2558: Self-Organized Collective Decision-Making in a 100-Robot Swarm
Gabriele Valentini, Heiko Hamann, Marco Dorigo

2564: Leveraging Common Structure to Improve Prediction across Related Datasets
Matt Barnes, Nick Gisolfi, Madalina Fiterau, Artur Dubrawski

2576: Acronym Disambiguation Using Word Embedding
Chao Li, Lei Ji, Jun Yan

2585: Graphical Representation of Assumption-Based Argumentation
Claudia Schulz

2614: Finding Meaningful Gaps to Guide Data Acquisition for a Radiation Adjudication System
Nick Gisolfi, Madalina Fiterau, Artur Dubrawski

71: Modelling Individual Negative Emotion Spreading Process with Mobile Phones
Zhanwei Du, Yongjian Yang, Chuang Ma, Yuan Bai

967: Time-Sensitive Opinion Mining for Prediction
Wenting Tu, David Cheung, Nikos Mamoulis

2499: Sorted Neighborhood for the Semantic Web
Mayank Kejriwal, Daniel P. Miranker

2597: A Goal-Based Model of Personality for Planning-Based Narrative Generation
Julio César Bahamón, Camille Barot, R. Michael Young

1:40 - 2:30

AAAI-15 / IAAI-15 Invited Talks (2 parallel)

Zilker Ballroom

AAAI-15 Invited Talk
Geoffrey Hinton (University of Toronto and Google Inc)
Deep Learning
Introduction by Stuart Russell

Texas Ballroom I-III

IAAI-15 Invited Talk
Rayid Ghani (University of Chicago)
Data Science for Social Good: Using Your Powers To Make a Social Impact!
Introduction by Peter Yeh

2:30 - 2:50

Coffee Break

2:50 - 4:30

AAAI-15 Technical Sessions / Senior Member Summary Talks

Texas I

Natural Language Processing 2

Talks

369: Extracting Verb Expressions Implying Negative Opinions
Huayi Li, Arjun Mukherjee, Jianfeng Si, Bing Liu

439: Unsupervised Phrasal Near-Synonym Generation from Text Corpora
Dishan Gupta, Jaime Carbonell, Anatole Gershman, Steve Klein, David Miller

756: Phrase Type Sensitive Tensor Indexing Model for Semantic Composition
Yu Zhao, Zhiyuan Liu, Maosong Sun

983: Learning Word Representations from Relational Graphs
Danushka Bollegala, Takanori Maehara, Yuichi Yoshida, Ken-ichi Kawarabayashi

2141: Sense-Aware Semantic Analysis: A Multi-Prototype Word Representation
Model Using Wikipedia
Zhaohui Wu, C. Lee Giles

Easily Accessible Paper
2243: Chinese Common Noun Phrase Resolution: An Unsupervised Probabilistic
Model Rivaling Supervised Resolvers
Chen Chen, Vincent Ng

Poster Ads
240: Microblog Sentiment Classification with Contextual Knowledge Regularization
Fangzhao Wu, Yangqiu Song, Yongfeng Huang

715: Generating Event Causality Hypotheses through Semantic Relations
Chikara Hashimoto, Kentaro Torisawa, Julien Kloetzer, Jong-Hoon Oh

798: Unsupervised Word Sense Disambiguation Using Markov Random Field and
Dependency Parser
Devendra Singh Chaplot, Pushpak Bhattacharyya, Ashwin Paranjape

926: Semantic Lexicon Induction from Twitter with Pattern Relatedness and Flexible
Term Length
Ashequl Qadir, Pablo N. Mendes, Daniel Gruhl, Neal Lewis

2088: *Refer-to-as* Relations as Semantic Knowledge
Song Feng, Sujith Ravi, Ravi Kumar, Polina Kuznetsova, Wei Liu, Alexander C. Berg,
Tamara L. Berg, Yejin Choi

Texas II-III

Computational Sustainability and AI 2

Talks
918: Aggregating Electric Cars to Sustainable Virtual Power Plants: The Value of
Flexibility in Future Electricity Markets
Micha Kahlen, Wolfgang Ketter

1689: Sharing Rides with Friends: A Coalition Formation Algorithm for Ridesharing
Filippo Bistaffa, Alessandro Farinelli, Sarvapali D. Ramchurn

1278: HVAC-Aware Occupancy Scheduling
BoonPing Lim, Menkes van den Briel, Sylvie Thiébaux, Scott Backhaus, Russell Bent

2309: Pattern Decomposition with Complex Combinatorial Constraints: Application to Materials Discovery
Stefano Ermon, Ronan Le Bras, Santosh K. Suram, John M. Gregoire, Carla P. Gomes, Bart Selman, Robert B. van Dover

593: FutureMatch: Combining Human Value Judgments and Machine Learning to Match in Dynamic Environments
John P. Dickerson, Tuomas Sandholm

Poster Ads
1391: Energy Usage Behavior Modeling in Energy Disaggregation via Marked Hawkes Process
Liangda Li, Hongyuan Zha

1722: Recommending Positive Links in Signed Social Networks by Optimizing a Generalized AUC
Dongjin Song, David A. Meyer

2043: Real-Time Predictive Optimization for Energy Management in a Hybrid Electric Vehicle
Alexander Styler, Illah Nourbakhsh

143: Incentivizing Users for Balancing Bike Sharing Systems
Adish Singla, Marco Santoni, Gábor Bartók, Pratik Mukerji, Moritz Meenen, Andreas Krause

1914: Data Analysis and Optimization for (Citi)Bike Sharing
Eoin O'Mahony, David B. Shmoys

297: A Simulator of Human Emergency Mobility following Disasters: Knowledge Transfer from Big Disaster Data
Xuan Song, Quanshi Zhang, Yoshihide Sekimoto, Ryosuke Shibasaki, Nicholas Jing Yuan**,** Xing Xie

1238: Risk Based Optimization for Improving Emergency Medical Systems
Sandhya Saisubramanian, Pradeep Varakantham, Hoong Chuin Lau

Texas V-VI

Knowledge Representation and Reasoning 5

Talks
1450: How Many Diagnoses Do We Need?
Roni Stern, Meir Kalech, Shelly Rogov, Alexander Feldman

278: Knowledge Forgetting in Circumscription: A Preliminary Report
Yisong Wang, Kewen Wang, Zhe Wang, Zhiqiang Zhuang

586: Partial Meet Revision and Contraction in Logic Programs
Sebastian Binnewies, Zhiqiang Zhuang, Kewen Wang

985: A Syntax-Independent Approach to Forgetting in Disjunctive Logic Programs
James P. Delgrande, Kewen Wang

1030: On the Role of Canonicity in Knowledge Compilation
Guy Van den Broeck, Adnan Darwiche

1078: Learning Partial Lexicographic Preference Trees over Combinatorial Domains
Xudong Liu, Mirek Truszczynski

Poster Ads
1766: A Comparison of Qualitative and Metric Spatial Relation Models for Scene
Understanding
Akshaya Thippur, Chris Burbridge, Lars Kunze, Marina Alberti, John Folkesson, Patric
Jensfelt, Nick Hawes

1982: Propagating Ranking Functions on a Graph: Algorithms and Applications
Buyue Qian, Xiang Wang, Ian Davidson

Hill Country AB

Multiagent Systems 2

Talks
357: An Empirical Study on the Practical Impact of Prior Beliefs over Policy Types
Stefano V. Albrecht, Jacob W. Crandall, Subramanian Ramamoorthy

1494: Incentives for Subjective Evaluations with Private Beliefs
Goran Radanovic, Boi Faltings

1907: UT Austin Villa 2014: RoboCup 3D Simulation League Champion via
Overlapping Layered Learning
Patrick MacAlpine, Mike Depinet, Peter Stone

2258: Automated Analysis of Commitment Protocols Using Probabilistic Model
Checking
Akin Günay, Song Songzheng, Yang Liu, Jie Zhang

9097: Game-Theoretic Approach for Non-Cooperative Planning
Jaume Jordán, Eva Onaindia

1103: Multi-Robot Auctions for Allocation of Tasks with Temporal Constraints
Ernesto Nunes, Maria Gini

Poster Ads
712: Facility Location with Double-Peaked Preferences
Aris Filos-Ratsikas, Minming Li, Jie Zhang, Qiang Zhang

1717: Fast Convention Formation in Dynamic Networks Using Topological Knowledge
Mohammad Rashedul Hasan, Anita Raja, Ana Bazzan

735: A Counter Abstraction Technique for the Verification of Robot Swarms
Panagiotis Kouvaros, Alessio Lomuscio

Big Bend

Cognitive Systems 1

Talks
1611: Spontaneous Retrieval from Long-Term Memory for a Cognitive Architecture
Justin Li, John Laird

331: Automatic Ellipsis Resolution: Recovering Covert Information from Text
Marjorie McShane, Petr Babkin

1295: Automated Construction of Visual-Linguistic Knowledge via Concept Learning from Cartoon Videos
Jung-Woo Ha, Kyung-Min Kim, Byoung-Tak Zhang

1523: Ontology-Based Information Extraction with a Cognitive Agent
Peter Lindes, Deryle W. Lonsdale, David W. Embley

1213: Extending Analogical Generalization with Near-Misses
Matthew D. McLure, Scott E. Friedman, Kenneth D. Forbus

854: Learning Plausible Inferences from Semantic Web Knowledge by Combining Analogical Generalization with Structured Logistic Regression
Chen Liang, Kenneth D. Forbus

Poster Ads
515: An Agent-Based Model of the Emergence and Transmission of a Language System for the Expression of Logical Combinations
Josefina Sierra-Santibáñez

2209: Predicting Emotion Perception across Domains: A Study of Singing and Speaking
Biqiao Zhang, Emily Mower Provost, Robert Swedberg, Georg Essl

2070: Constructing Models of User and Task Characteristics from Eye Gaze Data for User-Adaptive Information Highlighting
Matthew Gingerich, Cristina Conati

1189: Bayesian Affect Control Theory of Self
Jesse Hoey, Tobias Schröder

Texas VII

Senior Member Summary Talks 1

25: Towards User-Adaptive Information Visualization
Cristina Conati, Giuseppe Carenini, Dereck Toker, Sébastien Lallé

15: On the Diagnosis of Cyber-Physical Production Systems: State-of-the-Art and Research Agenda
Oliver Niggemann, Volker Lohweg

18: Languages for Mining and Learning
Luc De Raedt

31: Abstraction for Solving Large Incomplete-Information Games
Tuomas Sandholm

Hill Country CD (IAAI)

IAAI-15: Healthcare

Deployed: Graph Analysis for Detecting Fraud, Waste, and Abuse in Healthcare Data
Juan Liu, Eric Bier, Aaron Wilson, Tomo Honda, Sricharan Kumar, Leilani Gilpin, John Guerra-Gomez, Daniel Davies

Emerging: Automated Problem List Generation from Electronic Medical Records in IBM Watson
Murthy Devarakonda, Ching-Huei Tsou

Emerging: Preventing HIV Spread in Homeless Populations Using PSINET
Amulya Yadav, Leandro Soriano Marcolino, Eric Rice, Robin Petering, Hailey Winetrobe, Harmony Rhoades, Milind Tambe, Heather Carmichael

4:30 - 5:30

Long Break

5:30 - 6:30

Texas Ballroom

AAAI-15 Community Meeting
AAAI welcomes all conference attendees to this inaugural AAAI community meeting, which will also serve as the AAAI Annual Business Meeting. Please join us as we explore current initiatives, and help chart the future course and objectives of AAAI.
Moderator: *Thomas G. Dietterich, AAAI President*

6:30 - 8:00

Zilker Ballroom

AAAI-15 Poster / Demo Reception 2

The Poster / Demo Reception will include technical poster presentations of all papers presented today as poster ads, as well as the demos listed below. Student Abstract posters of talks presented during today's lunch break will also be presented, and robotics exhibitions and game exhibits will be available.

AAAI-15 Technical Demos
2485: A Planning-Based Assistance System for Setting Up a Home Theater
Pascal Bercher, Felix Richter, Thilo Hörnle, Thomas Geier, Daniel Höller, Gregor Behnke, Florian Nothdurft, Frank Honold, Wolfgang Minker, Michael Weber, Susanne Biundo

2486: Inferring Latent User Properties from Texts Published in Social Media

Svitlana Volkova, Yoram Bachrach, Michael Armstrong, Vijay Sharma

2498: Tartanian7: A Champion Two-Player No-Limit Texas Hold'em Poker-Playing Program
Noam Brown, Sam Ganzfried, Tuomas Sandholm

2624: Circumventing Robots' Failures by Embracing Their Faults: A Practical Approach to Planning for Autonomous Construction
Stefan Witwicki, Francesco Mondada

2625: On Correcting Misspelled Queries in Email Search
Abhijit Bhole, Raghavendra Udupa

2628: Crow Motion Monitoring with Thermodynamics-Inspired Feature
Xinfeng Zhang, Su Yang, Yuan Yan Tang, Weishan Zhang

2637: A Neural Probabilistic Model for Context Based Citation Recommendation
Wenyi Huang, Zhaohui Wu, Chen Liang, Prasenjit Mitra, C. Lee Giles

35: CrowdMR: Integrating Crowdsourcing with MapReduce for AI-Hard Problems
Jun Chen, Chaokun Wang, Yiyuan Bai

8:00 - 10:00

Foothills II, 17th Floor

AAAI-15 Game Night

Thursday, January 29

9:00 - 9:50

AAAI-15 Invited Talk

Zilker Ballroom

AAAI-15 Invited Talk
Meinolf Sellmann (IBM Thomas J. Watson Research Center)
Intelligent Decisions
Introduction by Holger H. Hoos

Texas Ballroom

AAAI-15 Competition Panel
Competitions: Do They Help Advance AI Research?
Panelists: Michael Bowling (University of Alberta), Koen Hindriks (TU Delft), Claude Sammut (UNSW Australia), and Sven Wachsmuth (Bielefeld University)
Moderator: Michael Thielscher (University of New South Wales)

9:50 - 10:10

Coffee Break

10:10 - 11:50

AAAI-15 Technical Sessions / What's Hot Talks

Texas I

Natural Language Processing 3

Talks
139: Dataless Text Classification with Descriptive LDA
Xingyuan Chen, Yunqing Xia, Peng Jin, John Carroll

391: Ordering-Sensitive and Semantic-Aware Topic Modeling
Min Yang, Tianyi Cui, Wenting Tu

517: A Neural Probabilistic Model for Context Based Citation Recommendation
Wenyi Huang, Zhaohui Wu, Chen Liang, Prasenjit Mitra, C. Lee Giles

615: Learning to Recommend Quotes for Writing
Jiwei Tan, Xiaojun Wan, Jianguo Xiao

718: Topical Word Embeddings
Yang Liu, Zhiyuan Liu, Tat-Seng Chua, Maosong Sun

Poster Ads
212: Recurrent Convolutional Neural Networks for Text Classification
Siwei Lai, Liheng Xu, Kang Liu, Jun Zhao

268: A Novel Neural Topic Model and Its Supervised Extension
Ziqiang Cao, Sujian Li, Yang Liu, Wenjie Li, Heng Ji

917: Surveyor: A System for Generating Coherent Survey Articles for Scientific Topics
Rahul Jha, Reed Coke, Dragomir Radev

1234: Topic Segmentation with an Ordering-Based Topic Model
Lan Du, John K. Pate, Mark Johnson

1256: A Probabilistic Covariate Shift Assumption for Domain Adaptation
Tameem Adel, Alexander Wong

1571: Towards Knowledge-Driven Annotation
Yassine Mrabet, Claire Gardent, Muriel Foulonneau, Elena Simperl, Eric Ras

1957: Gazetteer-Independent Toponym Resolution Using Geographic Word Profiles
Grant DeLozier, Jason Baldridge, Loretta London

Texas II-III

Game Theory and Economic Paradigms 3

Talks

261: Do Capacity Constraints Constrain Coalitions?
Michal Feldman, Ofir Geri

362: Cooperative Game Solution Concepts that Maximize Stability under Noise
Yuqian Li, Vincent Conitzer

1880: Solving Games with Functional Regret Estimation
Kevin Waugh, Dustin Morrill, J. Andrew Bagnell, Michael Bowling

724: Hedonic Coalition Formation in Networks
Martin Hoefer, Daniel Vaz, Lisa Wagner

974: Fair Information Sharing for Treasure Hunting
Yiling Chen, Kobbi Nissim, Bo Waggoner

1859: Exploring Information Asymmetry in Two-Stage Security Games
Haifeng Xu, Zinovi Rabinovich, Shaddin Dughmi, Milind Tambe

Poster Ads

2144: Balanced Trade Reduction for Dual-Role Exchange Markets
Dengji Zhao, Sarvapali D. Ramchurn, Enrico H. Gerding, Nichols R. Jennings

2214: Elicitation for Aggregation
Rafael M. Frongillo, Yiling Chen, Ian A. Kash

2281: Controlled School Choice with Soft Bounds and Overlapping Types
Ryoji Kurata, Masahiro Goto, Atsushi Iwasaki, Makoto Yokoo

2359: Audit Games with Multiple Defender Resources
Jeremiah Blocki, Nicolas Christin, Anupam Datta, Ariel Procaccia, Arunesh Sinha

Texas V-VI

Planning and Scheduling 3

Talks

AAAI-15 Outstanding Paper Award
909: From Non-Negative to General Operator Cost Partitioning
Florian Pommerening, Malte Helmert, Gabriele Röger, Jendrik Seipp

Easily Accessible Paper
812: Automatic Configuration of Sequential Planning Portfolios
Jendrik Seipp, Silvan Sievers, Malte Helmert, Frank Hutter

120: A Generalization of Sleep Sets Based on Operator Sequence Redundancy
Robert C. Holte, Yusra Alkhazraji, Martin Wehrle

552: Heuristics and Symmetries in Classical Planning
Alexander Shleyfman, Michael Katz, Malte Helmert, Silvan Sievers, Martin Wehrle

1173: Tractability of Planning with Loops
Siddharth Srivastava, Shlomo Zilberstein, Abhishek Gupta, Pieter Abbeel, Stuart Russell

666: Goal Recognition Design for Non-Optimal Agents
Sarah Keren, Avigdor Gal, Erez Karpas

Poster Ads
805: Tractable Cost-Optimal Planning over Restricted Polytree Causal Graphs
Meysam Aghighi, Peter Jonsson, Simon Ståhlberg

699: Factored Symmetries for Merge-and-Shrink Abstractions
Silvan Sievers, Martin Wehrle, Malte Helmert, Alexander Shleyfman, Michael Katz

1678: Some Fixed Parameter Tractability Results for Planning with Non-Acyclic
Domain-Transition Graphs
Christer Bäckström

1728: Measuring Plan Diversity: Pathologies in Existing Approaches and a New Plan
Distance Metric
Robert P. Goldman, Ugur Kuter

1419: Variable-Deletion Backdoors to Planning
Martin Kronegger, Sebastian Ordyniak, Andreas Pfandler

Hill Country AB

Vision 1

Talks
13: Integrating Image Clustering and Codebook Learning
Pengtao Xie, Eric Xing

1198: A Bayesian Approach to Perceptual 3D Object-Part Decomposition Using
Skeleton-Based Representations
Tarek El-Gaaly, Vicky Froyen, Ahmed Elgammal, Jacob Feldman, Manish Singh

1240: Colorization by Patch-Based Local Low-Rank Matrix Completion
Quanming Yao, James T. Kwok

1410: Spectral Clustering Using Multilinear SVD: Analysis, Approximations and
Applications
Debarghya Ghoshdastidar, Ambedkar Dukkipati

402: Learning to Describe Video with Weak Supervision by Exploiting Negative
Sentential Information
Haonan Yu, Jeffrey Mark Siskind

AAAI-15 Outstanding Student Paper Award
693: Surpassing Human-Level Face Verification Performance on LFW with
GaussianFace
Chaochao Lu, Xiaoou Tang

Poster Ads
15: Multi-View Point Registration via Alternating Optimization
Junchi Yan, Jun Wang, Hongyuan Zha, Xiaokang Yang, Stephen M. Chu

125: Sparse Deep Stacking Network for Image Classification
Jun Li, Heyou Chang, Jian Yang

986: Dictionary Learning with Mutually Reinforcing Group-Graph Structures
Hongteng Xu, Licheng Yu, Dixin Luo, Hongyuan Zha, Yi Xu

1454: Person Identification Using Anthropometric and Gait Data from Kinect Sensor
Virginia O. Andersson, Ricardo M. Araujo

2157: Approximate MaxEnt Inverse Optimal Control and its Application for Mental
Simulation of Human Interactions
De-An Huang, Amir-massoud Farahmand, Kris M. Kitani, J. Andrew Bagnell

Big Bend

Cognitive Systems 2

Talks
1040: Inference Graphs: Combining Natural Deduction and Subsumption Inference in
a Concurrent Reasoner
Daniel R. Schlegel, Stuart C. Shapiro

728: Providing Arguments in Discussions Based on the Prediction of Human
Argumentative Behavior
Ariel Rosenfeld, Sarit Kraus

1538: Scalable and Interpretable Data Representation for High-Dimensional,
Complex Data
Been Kim, Kayur Patel, Afshin Rostamizadeh, Julie Shah

Easily Accessible Paper
1343: When Suboptimal Rules
Avshalom Elmalech, David Sarne, Avi Rosenfeld, Eden Shalom Erez

1321: Heuristic Induction of Rate-Based Process Models
Pat Langley, Adam Arvay

Poster Ads
596: Using Supervised Learning to Uncover Deep Musical Structure
Phillip B. Kirlin, David D. Jensen

883: AffectiveSpace 2: Enabling Affective Intuition for Concept-Level Sentiment
Analysis
Erik Cambria, Jie Fu, Federica Bisio, Soujanya Poria

998: Moral Decision-Making by Analogy: Generalizations versus Exemplars
Joseph A. Blass, Kenneth D. Forbus

1068: Collaboration in Social Problem-Solving: When Diversity Trumps Network
Efficiency
Diego V. Noble, Marcelo O. R. Prates, Daniel S. Bossle, Luís C. Lamb

1497: An Association Network for Computing Semantic Relatedness
Keyang Zhang, Kenny Q. Zhu, Seung-won Hwang

1587: A Stackelberg Game Approach for Incentivizing Participation in Online Educational Forums with Heterogeneous Student Population
Rohith D Vallam, Priyanka Bhatt, Debmalya Mandal, Y. Narahari

2392: Dialogue Understanding in a Logic of Action and Belief
Alfredo Gabaldon, Pat Langley

Texas VII

What's Hot Talks 4

What's Hot in the Angry Birds Artificial Intelligence Competition
Jochen Renz
(Abstract: AIBIRDS: The Angry Birds Artificial Intelligence Competition by Jochen Renz)

What's Hot in the Automated Negotiating Agents Competition
Koen Hindriks

What's Hot in the SAT and ASP Competitions
Marijn Heule, Torsten Schaub
(Abstract: What's Hot in the SAT and ASP Competitions by Marijn J. H. Heule, Torsten Schaub)

What's Hot in Knowledge Representation and Reasoning (KR)
Chitta Baral
(Abstract: Knowledge Representation and Reasoning: What's Hot by Chitta Baral, Giuseppe De Giacomo)

What's Hot in Knowledge Discovery and Data Mining (KDD)
Wei Wang
(Abstract: Data Science for Social Good 2014 KDD Highlights by Wei Wang)

What's Hot in Crowdsourcing and Human Computation (HCOMP)
Jeffrey Bigham
(Abstract: What's Hot in Crowdsourcing and Human Computation by Jeffrey P. Bigham)

Hill Country CD

IAAI-15: Fraud Detection and Planning

Deployed: Robust System for Identifying Procurement Fraud
Amit Dhurandhar, Rajesh Ravi, Bruce Graves, Gopikrishnan Maniachari, Markus Ettl

Emerging: Design and Experiment of a Collaborative Planning Service for NetCentric International Brigade Command
Christophe Guettier, Willy Lamal, Israël Mayk, Jacques Yelloz

Deployed: Activity Planning for a Lunar Orbital Mission

John L. Bresina

11:50 - 1:20

Lunch Break / Student Abstract Talks / AAAI Lunch with a Fellow Program

Texas I

Student Abstract Talks

Poster Ads
2551: Accelerating SAT Solving by Common Subclause Elimination
Yaowei Yan, Chris E. Gutierrez, Jeriah Jn-Charles, Forrest Sheng Bao, Yuanlin Zhang

2574: Dealing with Trouble: A Data-Driven Model of a Repair Type for a
Conversational Agent
Sviatlana Höhn

2583: Combining Ontology Class Expression Generation with Mathematical Modeling
for Ontology Learning
Jedrzej Potoniec, Agnieszka Lawrynowicz

2584: Effect of Spatial Pooler Initialization on Column Activity in Hierarchical
Temporal Memory
Mackenzie Leake, Liyu Xia, Kamil Rocki, Wayne Imaino

2587: Active Advice Seeking for Inverse Reinforcement Learning
Phillip Odom, Sriraam Natarajan

2606: A Sequence Labeling Approach to Deriving Word Variants
Jennifer D'Souza

2549: Learning Word Vectors Efficiently Using Shared Representations and
Document Representations
Qun Luo, Weiran Xu

2569: What Is the Longest River in the USA? Semantic Parsing for Aggregation
Questions
Kun Xu, Sheng Zhang, Yansong Feng, Songfang Huang, Dongyan Zhao

2615: A Multi-Pass Sieve for Name Normalization
Jennifer D'Souza

2548: Improving Microblog Retrieval from Exterior Corpus by Automatically
Constructing a Microblogging Corpus
Wenting Tu, David Cheung, Nikos Mamoulis

2553: Spatio-Temporal Signatures of User-Centric Data: How Similar Are We?
Samta Shukla, Aditya Telang, Salil Joshi, L. Venkat Subramaniam

2554: Coupled Collaborative Filtering for Context-Aware Recommendation
Xinxin Jiang, Wei Liu, Longbing Cao, Guodong Long

2595: Predicting the Quality of User Experiences to Improve Productivity and Wellness
Priya Lekha Donti, Jacob Rosenbloom, Alex Gruver, James C. Boerkoel Jr.

2601: Designing Vaccines that Are Robust to Virus Escape
Swetasudha Panda, Yevgeniy Vorobeychik

2607: A Succinct Conceptualization of the Foundations for a Network Organization Paradigm
Saad Alqithami

2609: Actionable Combined High Utility Itemset Mining
Jingyu Shao, Junfu Yin, Wei Liu, Longbing Cao

2619: Stochastic Blockmodeling for Online Advertising
Li Chen, Matthew Patton

2573: Improving Cross-Domain Recommendation through Probabilistic Cluster-Level Latent Factor Model
Siting Ren, Sheng Gao, Jianxin Liao, Jun Guo

2589: Characterizing Performance of Consistency Algorithms by Algorithm Configuration of Random CSP Generators
Daniel J. Geschwender, Robert J. Woodward, Berthe Y. Choueiry

2591: On Manipulablity of Random Serial Dictatorship in Sequential Matching with Dynamic Preferences
Hadi Hosseini, Kate Larson, Robin Cohen

2598: Placing Influencing Agents in a Flock
Katie Genter, Peter Stone

1:20 - 1:50

ZILKER

Video Competition Awards

1:55 - 3:10

AAAI-15 Technical Sessions / Robotics: Science and Systems 2014 Presentations (RSS) 2

Texas I

Machine Learning 8

Talks
1019: Marginalized Denoising for Link Prediction and Multi-Label Learning
Zheng Chen, Minmin Chen, Kilian Q. Weinberger, Weixiong Zhang

673: Large-Margin Multi-Label Causal Feature Learning

Chang Xu, Dacheng Tao, Chao Xu

2285: Doubly Robust Covariate Shift Correction
Sashank Jakkam Reddi, Barnabás Póczos, Alex Smola

Poster Ads
94: TODTLER: Two-Order-Deep Transfer Learning
Jan Van Haaren, Andrey Kolobov, Jesse Davis

112: Absent Multiple Kernel Learning
Xinwang Liu, Lei Wang, Jianping Yin, Yong Dou, Jian Zhang

349: Learning Sparse Representations from Datasets with Uncertain Group
Structures: Model, Algorithm and Applications
Longwen Gao, Shuigeng Zhou

444: Large Margin Metric Learning for Multi-Label Prediction
Weiwei Liu, Ivor W. Tsang

651: Variational Inference for Nonparametric Bayesian Quantile Regression
Sachinthaka Abeywardana, Fabio Ramos

668: Multi-Task Learning and Algorithmic Stability
Yu Zhang

843: Random Gradient Descent Tree: A Combinatorial Approach for SVM with
Outliers
Hu Ding, Jinhui Xu

863: A Reduction of the Elastic Net to Support Vector Machines with an Application to
GPU Computing
Quan Zhou, Wenlin Chen, Shiji Song, Jacob R. Gardner, Kilian Q. Weinberger, Yixin
Chen

1044: Nyström Approximation for Sparse Kernel Methods: Theoretical Analysis and
Empirical Evaluation
Zenglin Xu, Rong Jin, Bin Shen, Shenghuo Zhu

1243: Guassian Cardinality Restricted Boltzmann Machines
Cheng Wan, Xiaoming Jin, Guiguang Ding, Dou Shen

1518: Unsupervised Feature Learning through Divergent Discriminative Feature
Accumulation
Paul A. Szerlip, Gregory Morse, Justin K. Pugh, Kenneth O. Stanley

1554: Adaptive Sampling with Optimal Cost for Class-Imbalance Learning
Yuxin Peng

1845: Non-Linear Regression for Bag-of-Words Data via Gaussian Process Latent
Variable Set Model
Yuya Yoshikawa, Tomoharu Iwata, Hiroshi Sawada

2029: Initializing Bayesian Hyperparameter Optimization via Meta-Learning

Matthias Feurer, Jost Tobias Springenberg, Frank Hutter

2160: Parallel Gaussian Process Regression for Big Data: Low-Rank Representation Meets Markov Approximation
Kian Hsiang Low, Jiangbo Yu, Jie Chen, Patrick Jaillet

Texas II-III

AI and the Web 5

Talks
2321: Sub-Merge: Diving Down to the Attribute-Value Level in Statistical Schema Matching
Zhe Lim, Benjamin I. P. Rubinstein

317: OMNI-Prop: Seamless Node Classification on Arbitrary Label Correlation
Yuto Yamaguchi, Christos Faloutsos, Hiroyuki Kitagawa

445: Retweet Behavior Prediction Using Hierarchical Dirichlet Process
Qi Zhang, Yeyun Gong, Ya Guo, Xuanjing Huang

1142: RAIN: Social Role-Aware Information Diffusion
Yang Yang, Jie Tang, Cane Wing-ki Leung, Yizhou Sun, Qicong Chen, Juanzi Li, Qiang Yang

Poster Ads
2334: Using Matched Samples to Estimate the Effects of Exercise on Mental Health from Twitter
Virgile Landeiro Dos Reis, Aron Culotta

1176: VELDA: Relating an Image Tweet's Text and Images
Tao Chen, Hany M. SalahEldeen, Xiangnan He, Min-Yen Kan, Dongyuan Lu

849: Inferring Same-as Facts from Linked Data: An Iterative Import-by-Query Approach
Mustafa Al-Bakri, Manuel Atencia, Steffen Lalande, Marie-Christine Rousset

328: Prajna: Towards Recognizing Whatever You Want from Images without Image Labeling
Xian-Sheng Hua, Jin Li

1816: Exploring Social Context for Topic Identification in Short and Noisy Texts
Xin Wang, Ying Wang, Wanli Zuo, Guoyong Cai

746: Visually Interpreting Names as Demographic Attributes by Exploiting Click-Through Data
Yan-Ying Chen, Yin-Hsi Kuo, Chun-Che Wu, Winston H. Hsu

164: Incorporating Implicit Link Preference into Overlapping Community Detection
Hongyi Zhang, Irwin King, Michael R. Lyu

Texas V-VI

AI and the Web 7

Talks

477: A Tri-Role Topic Model for Domain-Specific Question Answering
Zongyang Ma, Aixin Sun, Quan Yuan, Gao Cong

634: Efficient Top-k Shortest-Path Distance Queries on Large Networks by Pruned Landmark Labeling
Takuya Akiba, Takanori Hayashi, Nozomi Nori, Yoichi Iwata, Yuichi Yoshida

796: A Probabilistic Model for Bursty Topic Discovery in Microblogs
Xiaohui Yan, Jiafeng Guo, Yanyan Lan, Jun Xu, Xueqi Cheng

1140: A Stochastic Model for Detecting Heterogeneous Link Communities in Complex Networks
Dongxiao He, Dayou Liu, Di Jin, Weixiong Zhang

1351: A Hybrid Approach of Classifier and Clustering for Solving the Missing Node Problem
Sigal Sina, Avi Rosenfeld, Sarit Kraus, Navot Akiva

Hill Country AB

Vision 2

Talks
Easily Accessible Paper
374: Deep Representation Learning with Target Coding
Shuo Yang, Ping Luo, Chen Change Loy, Kenneth W. Shum, Xiaoou Tang

762: Learning Face Hallucination in the Wild
Erjin Zhou, Haoqiang Fan, Zhimin Cao, Yuning Jiang, Qi Yin

787: Building Effective Representations for Sketch Recognition
Jun Guo, Changhu Wang, Hongyang Chao

Poster Ads
1491: A Local Sparse Model for Matching Problem
Bo Jiang, Jin Tang, Chris Ding, Bin Luo

107: Learning Predictable and Discriminative Attributes for Visual Recognition
Yuchen Guo, Guiguang Ding, Xiaoming Jin, Jianmin Wang

228: Complex Event Detection via Event Oriented Dictionary Learning
Yan Yan, Yi Yang, Haoquan Shen, Deyu Meng, Gaowen Liu, Alexander Hauptmann, Nicu Sebe

277: Cross-Modal Image Clustering via Canonical Correlation Analysis
Cheng Jin, Wenhui Mao, Ruiqi Zhang, Yuejie Zhang, Xiangyang Xue

327: Jointly Modeling Deep Video and Compositional Text to Bridge Vision and Language in a Unified Framework
Ran Xu, Caiming Xiong, Wei Chen, Jason J. Corso

1313: On Vectorization of Deep Convolutional Neural Networks for Vision Tasks
Jimmy SJ. Ren, Li Xu

455: Multi-Tensor Completion with Common Structures
Chao Li, Qibin Zhao, Junhua Li, Andrzej Cichocki, Lili Guo

852: Temporally Adaptive Restricted Boltzmann Machine for Background Modeling
Linli Xu, Yitan Li, Yubo Wang, Enhong Chen

1046: Compute Less to Get More: Using ORC to Improve Sparse Filtering
Johannes Lederer, Sergio Guadarrama

1113: Swiss-System Based Cascade Ranking for Gait-Based Person Re-identification
Lan Wei, Yonghong Tian, Yaowei Wang, Tiejun Huang

1716: Online Detection of Abnormal Events Using Incremental Coding Length
Jayanta K. Dutta, Bonny Banerjee

1798: Exploring Semantic Inter-Class Relationships (SIR) for Zero-Shot Action Recognition
Chuang Gan, Ming Lin, Yi Yang, Yueting Zhuang, Alexander G. Hauptmann

Big Bend

Game Theory and Economic Paradigms 4

Talks
860: A Mechanism Design Approach to Measure Awareness
Diodato Ferraioli, Carmine Ventre, Gabor Aranyi

Easily Accessible Paper
1681: Strategy-Proof and Efficient Kidney Exchange Using a Credit Mechanism
Chen Hajaj, John P. Dickerson, Avinatan Hassidim, Tuomas Sandholm, David Sarne

1781: Assessing the Robustness of Cremer-McLean with Automated Mechanism Design
Michael Albert, Vincent Conitzer, Giuseppe Lopomo

2050: A Unifying Hierarchy of Valuations with Complements and Substitutes
Uriel Feige, Michal Feldman, Nicole Immorlica, Rani Izsak, Brendan Lucier, Vasilis Syrgkanis

2071: A Faster Core Constraint Generation Algorithm for Combinatorial Auctions
Benedikt Bünz, Sven Seuken, Benjamin Lubin

Texas VII

Robotics: Science and Systems 2014 (RSS) Presentations 2

Asking for Help Using Inverse Semantics
Stefanie Tellex, Ross Knepper, Adrian Li, Daniela Rus, Nicholas Roy

Learning Articulated Motions from Visual Demonstration
Sudeep Pillai, Matthew Walter, Seth Teller

Tell Me Dave: Context-Sensitive Grounding of Natural Language to Manipulation Instructions
Dipendra Kumar Misra, Jaeyong Sung, Kevin Lee, Ashutosh Saxena

Learning to Locate from Demonstrated Searches
Paul Vernaza, Anthony Stentz

Fully Decentralized Task Swaps with Optimized Local Searching
Lantao Liu, Nathan Michael, Dylan Shell

Hill Country CD

Natural Language Processing 4

Talks
822: Local Context Sparse Coding
Seungyeon Kim, Joonseok Lee, Guy Lebanon, Haesun Park

1311: English Light Verb Construction Identification Using Lexical Knowledge
Wei-Te Chen, Claire Bonial, Martha Palmer

Easily Accessible Paper
2146: Learning Greedy Policies for the Easy-First Framework
Jun Xie, Chao Ma, Janardhan Rao Doppa, Prashanth Mannem, Xiaoli Fern, Thomas G. Dietterich, Prasad Tadepalli

2350: Weakly-Supervised Grammar-Informed Bayesian CCG Parser Learning
Dan Garrette, Chris Dyer, Jason Baldridge, Noah A. Smith

Poster Ads
46: Word Segmentation for Chinese Novels
Likun Qiu, Yue Zhang

850: A Stratified Strategy for Efficient Kernel-Based Learning
Simone Filice, Danilo Croce, Roberto Basili

1526: Joint Anaphoricity Detection and Coreference Resolution with Constrained Latent Structures
Emmanuel Lassalle, Pascal Denis

1976: Fast and Accurate Prediction of Sentence Specificity
Junyi Jessy Li, Ani Nenkova

1124: Mining User Consumption Intention from Social Media Using Domain Adaptive Convolutional Neural Network
Xiao Ding, Ting Liu, Junwen Duan, Jian-Yun Nie

Zilker 4

IAAI 30th Anniversary Paper

Process Diagnosis System (PDS) – A 30 Year History
Edward D. Thompson, Ethan Frolich, James C. Bellows, Benjamin E. Bassford,

Edward J. Skiko, Mark S. Fox

3:10 - 3:30
Coffee Break

3:30 - 4:45
AAAI-15 Technical Sessions / Robotics Student Fellowship Talks

Texas I

Machine Learning 9

Talks
152: Bayesian Maximum Margin Principal Component Analysis
Changying Du, Shandian Zhe, Fuzhen Zhuang, Yuan Qi, Qing He, Zhongzhi Shi

235: SP-SVM: Large Margin Classifier for Data on Multiple Manifolds
Bin Shen, Bao-Di Liu, Qifan Wang, Yi Fang, Jan P. Allebach

1091: Self-Paced Curriculum Learning
Lu Jiang, Deyu Meng, Qian Zhao, Shiguang Shan, Alexander G. Hauptmann

Poster Ads
74: Noise-Robust Semi-Supervised Learning by Large-Scale Sparse Coding
Zhiwu Lu, Xin Gao, Liwei Wang, Ji-Rong Wen, Songfang Huang

AAAI-15 Outstanding Student Paper Honorable Mention
1125: Sparse Bayesian Multiview Learning for Simultaneous Association Discovery
and Diagnosis of Alzheimer's Disease
Shandian Zhe, Zenglin Xu, Yuan Qi, Peng Yu

522: Stable Feature Selection from Brain sMRI
Bo Xin, Lingjing Hu, Yizhou Wang, Wen Gao

549: Clustering-Based Collaborative Filtering for Link Prediction
Xiangyu Wang, Dayu He, Danyang Chen, Jinhui Xu

617: Eigenvalues Ratio for Kernel Selection of Kernel Methods
Yong Liu, Shizhong Liao

719: Kickback Cuts Backprop's Red-Tape: Biologically Plausible Credit Assignment in
Neural Networks
David Balduzzi, Hastagiri Vanchinathan, Joachim Buhmann

999: Pareto Ensemble Pruning
Chao Qian, Yang Yu, Zhi-Hua Zhou

1011: Cross-Modal Similarity Learning via Pairs, Preferences, and Active Supervision
Yi Zhen, Piyush Rai, Hongyuan Zha, Lawrence Carin

1468: Optimizing Bag Features for Multiple-Instance Retrieval

Zhouyu Fu, Feifei Pan, Cheng Deng, Wei Liu

1137: Generalization Analysis for Game-Theoretic Machine Learning
Haifang Li, Fei Tian, Wei Chen, Tao Qin, Zhi-Ming Ma, Tie-Yan Liu

1227: Never-Ending Learning
Tom Mitchell, William Cohen, Estevam Hruschka, Partha Talukdar, Justin Betteridge, Andrew Carlson, Bhavana Dalvi, Matt Gardner, Bryan Kisiel, Jayant Krishnamurthy, Ni Lao, Kathryn Mazaitis, Tahir Mohamed, Ndapa Nakashole, Emmanouil Antonios Platanios, Alan Ritter, Mehdi Samadi, Burr Settles, Richard Wang, Derry Wijaya, Abhinav Gupta, Xinlei Chen, Abulhair Saparov, Malcolm Greaves, Joel Welling

1268: Localized Centering: Reducing Hubness in Large-Sample Data
Kazuo Hara, Ikumi Suzuki, Masashi Shimbo, Kei Kobayashi, Kenji Fukumizu, Milos Radovanovic

1509: Graph-Sparse LDA: A Topic Model with Structured Sparsity
Finale Doshi-Velez, Byron C. Wallace, Ryan Adams

9100: Pattern-Based Variant-Best-Neighbors Respiratory Motion Prediction Using Orthogonal Polynomials Approximation
Kin Ming Kam, Shouyi Wang, Stephen R. Bowen, Wanpracha Chaovalitwongse

Texas II-III

AI and the Web 6

Talks
55: Estimating Temporal Dynamics of Human Emotions
Seungyeon Kim, Joonseok Lee, Guy Lebanon, Haesun Park

1222: Approximating Model-Based ABox Revision in DL-Lite: Theory and Practice
Guilin Qi, Zhe Wang, Kewen Wang, Xuefeng Fu, Zhiqiang Zhuang

1399: Trust Models for RDF Data: Semantics and Complexity
Valeria Fionda, Gianluigi Greco

686: Answering Conjunctive Queries over *EL* Knowledge Bases with Transitive and Reflexive Roles
Giorgio Stefanoni, Boris Motik

Poster Ads
367: Handling owl:sameAs via Rewriting
Boris Motik, Yavor Nenov, Robert Piro, Ian Horrocks

1693: Extracting Bounded-Level Modules from Deductive RDF Triplestores
Marie-Christine Rousset, Federico Ulliana

590: Mining User Intents in Twitter: A Semi-Supervised Approach to Inferring Intent Categories for Tweets
Jinpeng Wang, Gao Cong, Wayne Xin Zhao, Xiaoming Li

1758: CrowdWON: A Modelling Language for Crowd Processes Based on Workflow Nets

David Sánchez-Charles, Victor Muntés-Mulero, Marc Solé, Jordi Nin

1899: Using Frame Semantics for Knowledge Extraction from Twitter
Anders Søgaard, Barbara Plank, Hector Martinez Alonso

2471: An Unsupervised Framework of Exploring Events on Twitter: Filtering, Extraction and Categorization
Deyu Zhou, Liangyu Chen, Yulan He

1029: Target-Dependent Churn Classification in Microblogs
Hadi Amiri, Hal Daume III

Texas V-VI

Integrated Systems Track 1

Talks
9047: Toward Mobile Robots Reasoning Like Humans
Jean Oh, Arne Suppé, Felix Duvallet, Abdeslam Boularias, Luis Navarro-Serment, Martial Hebert, Anthony Stentz, Jerry Vinokurov, Oscar Romero, Christian Lebiere, Robert Dean

9091: Learning to Manipulate Unknown Objects in Clutter by Reinforcement
Abdeslam Boularias, J. Andrew Bagnell, Anthony Stentz

9045: Robot Learning Manipulation Action Plans by "Watching" Unconstrained Videos from the World Wide Web
Yezhou Yang, Yi Li, Cornelia Fermüller, Yiannis Aloimonos

9040: Bayesian Active Learning-Based Robot Tutor for Children's Word-Reading Skills
Goren Gordon, Cynthia Breazeal

Poster Ads
9008: Integration and Evaluation of a Matrix Factorization Sequencer in Large Commercial ITS
Carlotta Schatten, Ruth Janning, Lars Schmidt-Thieme

9071: Going Beyond Literal Command-Based Instructions: Extending Robotic Natural Language Interaction Capabilities
Tom Williams, Gordon Briggs, Bradley Oosterveld, Matthias Scheutz

9009: RANSAC versus CS-RANSAC
Geun-Sik Jo, Kee-Sung Lee, Devy Chandra, Chol-Hee Jang, Myung-Hyun Ga

9077: CORPP: Commonsense Reasoning and Probabilistic Planning, as Applied to Dialog with a Mobile Robot
Shiqi Zhang, Peter Stone

9022: Tackling Mental Health by Integrating Unobtrusive Multimodal Sensing
Dawei Zhou, Jiebo Luo, Vincent Silenzio, Yun Zhou, Jile Hu, Glenn Currier, Henry Kautz

Hill Country AB

Search and Constraint Satisfaction 1

Talks

397: The Extendable-Triple Property: A New CSP Tractable Class beyond BTP
Philippe Jégou, Cyril Terrioux

2192: SAT Modulo Monotonic Theories
Sam Bayless, Noah Bayless, Holger H. Hoos, Alan J. Hu

1667: SAT-Based Strategy Extraction in Reachability Games
Niklas Een, Alexander Legg, Nina Narodytska, Leonid Ryzhyk

962: On Computing Maximal Subsets of Clauses that Must Be Satisfiable with Possibly Mutually-Contradictory Assumptive Contexts
Philippe Besnard, Éric Grégoire, Jean-Marie Lagniez

Poster Ads

818: Efficient Extraction of QBF (Counter)models from Long-Distance Resolution Proofs
Valeriy Balabanov, Jie-Hong R. Jiang, Mikolás Janota, Magdalena Widl

961: Exploiting Determinism to Scale Relational Inference
Mohamed-Hamza Ibrahim, Christopher Pal, Gilles Pesant

1204: Just Count the Satisfied Groundings: Scalable Local-Search and Sampling Based Inference in MLNs
Deepak Venugopal, Somdeb Sarkhel, Vibhav Gogate

Big Bend

Game Theory and Economic Paradigms 5

Talks

1711: Analysis of Equilibria in Iterative Voting Schemes
Zinovi Rabinovich, Svetlana Obraztsova, Omer Lev, Evangelos Markakis, Jeffrey S. Rosenschein

2017: Strategic Voting and Strategic Candidacy
Markus Brill, Vincent Conitzer

2065: Optimal Personalized Filtering against Spear-Phishing Attacks
Aron Laszka, Yevgeniy Vorobeychik, Xenofon Koutsoukos

2093: Stable Invitations
Hooyeon Lee, Yoav Shoham

Poster Ads

1873: Price Evolution in a Continuous Double Auction Prediction Market with a Scoring-Rule Based Market Maker
Mithun Chakraborty, Sanmay Das, Justin Peabody

2084: The Pricing War Continues: On Competitive Multi-Item Pricing

Omer Lev, Joel Oren, Craig Boutilier, Jeffrey S. Rosenschein

1879: The Complexity of Recognizing Incomplete Single-Crossing Elections
Edith Elkind, Piotr Faliszewski, Martin Lackner, Svetlana Obraztsova

224: Mechanism Design for Team Formation
Mason Wright, Yevgeniy Vorobeychik

1560: Truthful Mechanisms without Money for Non-Utilitarian Heterogeneous Facility Location
Paolo Serafino, Carmine Ventre

1224: Incentive Networks
Yuezhou Lv, Thomas Moscibroda

Texas VII

Robotics Student Fellowship Talks 2

Socially Assistive Robotics for Long-Term Health Behavior Change
Jillian Greczek

The Development of Socially Assistive Robots for Healthcare Applications to Improve Quality of Life
Wing-Yue Geoffrey Louie

Intent Prediction in Human-Robot Interaction
Matthew O. Derry

Learning and Grounding Haptic Affordances Using Demonstration and Human-Guided Exploration
Vivian Chu

Apprenticeship Scheduling for Human-Robot Teams in Manufacturing
Matthew Craig Gombolay

Following a Target Whose Behavior Is Predictable
Florian Shkurti

Multi-Agent Rendezvous
Malika Meghjani

Hill Country CD

Game Playing and Interactive Entertainment 1

Talks
258: Continuity Editing for 3D Animation
Quentin Galvane, Rémi Ronfard, Christophe Lino, Marc Christie

612: Lifting Model Sampling for General Game Playing to Incomplete-Information Models
Michael Schofield, Michael Thielscher

923: Automatic Generation of Alternative Starting Positions for Simple Traditional Board Games
Umair Z. Ahmed, Krishnendu Chatterjee, Sumit Gulwani

1148: Pruning Game Tree by Rollouts
Bojun Huang

1444: A Logic for Reasoning about Game Strategies
Dongmo Zhang, Michael Thielscher

4:45 - 5:45

Long break

5:45 - 6:45

Texas Ballroom

AAAI-15 Debate on Autonomous Weapons
Participants: Ron Arkin (Georgia Institute of Technology) and Stephen Goose (Executive Director, Arms Division, Human Rights Watch)
Moderator: Thomas G. Dietterich, AAAI President (Oregon State University)

6:45 - 8:15

Zilker Ballroom

AAAI-15 Poster /Demo Reception 3

The Poster / Demo Reception will include technical poster presentations of all papers presented today as poster ads, as well as the demos listed below. Student Abstract posters of talks presented during today's lunch break will also be presented, and robotics exhibitions and game exhibits will be available.

AAAI-15 Technical Demos

2660: Gene Selection in Microarray Datasets Using Progressively Refined PSO Scheme
Yamuna Prasad, K. K. Biswas

2666: Multi-Agent Dynamic Coupling for Cooperative Vehicles Modeling
Maxime Guériau, Romain Billot, Nour-Eddin El Faouzi, Salima Hassas, Frédéric Armetta

2673: Visualizing Inference
Henry Lieberman, Joseph Henke

2675: Salient Object Detection via Objectness Proposals
Tam V. Nguyen

2676: Visualization Techniques for Topic Model Checking

Jaimie Murdock, Colin Allen

Friday, January 30

9:00 - 9:50

AAAI-15 Invited Talk (2 parallel)

Zilker Ballroom 1-2

AAAI-15 Invited Talk
Lise Getoor (University of California, Santa Cruz)
Using Statistics and Semantics to Solve Big (Graph) Data Problems
Introduction by Luc De Raedt

Zilker Ballroom 3-4

AAAI-15 Invited Talk
Michael Bowling (University of Alberta)
von Neumann's Dream
Introduction by Tuomas Sandholm

9:50 - 10:00

Zilker Ballroom 1-2

AAAI-15 Award Ceremony

10:00 - 10:20

Coffee Break

10:20 - 11:20

AAAI-15 Technical Sessions / Senior Member Summary Talk

Zilker Ballroom 1

Robotics 1

Talks
419: Intent Prediction and Trajectory Forecasting via Predictive Inverse Linear-Quadratic Regulation
Mathew Monfort, Anqi Liu, Brian D. Ziebart

1765: Model-Based Reinforcement Learning in Continuous Environments Using Real-Time Constrained Optimization
Olov Andersson, Fredrik Heintz, Patrick Doherty

1784: Approximately Optimal Risk-Averse Routing Policies via Adaptive Discretization
Darrell Hoy, Evdokia Nikolova

Easily Accessible Paper
2124: Reusing Previously Found A* Paths for Fast Goal-Directed Navigation in Dynamic Terrain
Carlos Hernández, Roberto Asín, Jorge A. Baier

Zilker Ballroom 2

Heuristic Search and Optimization 2

Talks
2263: BDD-Constrained Search: A Unified Approach to Constrained Shortest Path Problems
Masaaki Nishino, Norihito Yasuda, Shin-ichi Minato, Masaaki Nagata

759: Complexity Results for Compressing Optimal Paths
Adi Botea, Ben Strasser, Daniel Harabor

1915: On Interruptible Pure Exploration in Multi-Armed Bandits
Alexander Shleyfman, Antonín Komenda, Carmel Domshlak

1038: Proximal Operators for Multi-Agent Path Planning
José Bento, Nate Derbinsky, Charles Mathy, Jonathan S. Yedidia

Zilker Ballroom 3

Search and Constraint Satisfaction 2

Talks
1197: Solving Distributed Constraint Optimization Problems Using Logic Programming
Tiep Le, Tran Cao Son, Enrico Pontelli, William Yeoh

218: Distributed Multiplicative Weights Methods for DCOP
Daisuke Hatano, Yuichi Yoshida

2457: Strong Bounds Consistencies and Their Application to Linear Constraints
Christian Bessiere, Anastasia Paparrizou, Kostas Stergiou

1309: Binarisation via Dualisation for Valued Constraints
David A. Cohen, Martin C. Cooper, Peter G. Jeavons, Stanislav Živný

Zilker Ballroom 4

Vision 3

Talks
51: Metric Learning-Driven Multi-Task Structured Output Optimization for Robust Keypoint Tracking
Liming Zhao, Xi Li, Jun Xiao, Fei Wu, Yueting Zhuang

182: Automatic Topic Discovery for Multi-Object Tracking

Wenhan Luo, Björn Stenger, Xiaowei Zhao, Tae-Kyun Kim

814: Online Dictionary Learning on Symmetric Positive Definite Manifolds with Vision Applications
Shengping Zhang, Shiva Kasiviswanathan, Pong C. Yuen, Mehrtash Harandi

1314: A Boosted Multi-Task Model for Pedestrian Detection with Occlusion Handling
Chao Zhu, Yuxin Peng

11:20 - 11:30

Break (no refreshments)

11:30 - 12:30

AAAI-15 Technical Sessions / Senior Member Summary Talks

Zilker Ballroom 1

Robotics 2

Talks
2251: SCRAM: Scalable Collision-Avoiding Role Assignment with Minimal-Makespan for Formational Positioning
Patrick MacAlpine, Eric Price, Peter Stone

2188: Learning to Mediate Perceptual Differences in Situated Human-Robot Dialogue
Changsong Liu, Joyce Y. Chai

1706: Spatio-Spectral Exploration Combining In Situ and Remote Measurements
David R. Thompson, David Wettergreen, Greydon Foil, Michael Furlong, Anatha Ravi Kiran

151: An Entorhinal-Hippocampal Model for Simultaneous Cognitive Map Building
Miaolong Yuan, Bo Tian, Vui Ann Shim, Huajin Tang, Haizhou Li

Zilker Ballroom 2

Heuristic Search and Optimization 3

Talks
1301: Massively Parallel A* Search on a GPU
Yichao Zhou, Jianyang Zeng

810: On Unconstrained Quasi-Submodular Function Optimization
Jincheng Mei, Kang Zhao, Bao-Liang Lu

1820: A Theoretical Analysis of the Optimization by Gaussian Continuation
Hossein Mobahi, John W. Fisher III

1997: Incremental Weight Elicitation for Multiobjective State Space Search
Nawal Benabbou, Patrice Perny

Zilker Ballroom 3

Planning and Scheduling 4

Talks
916: Tighter Value Function Bounds for Bayesian Reinforcement Learning
Kanghoon Lee, Kee-Eung Kim

1568: Reward Shaping for Model-Based Bayesian Reinforcement Learning
Hyeoneun Kim, Woosang Lim, Kanghoon Lee, Yung-Kyun Noh, Kee-Eung Kim

1324: Approximate Linear Programming for Constrained Partially Observable Markov Decision Processes
Pascal Poupart, Aarti Malhotra, Pei Pei, Kee-Eung Kim, Bongseok Goh, Michael Bowling

901: Scalable Planning and Learning for Multiagent POMDPs
Christopher Amato, Frans A. Oliehoek

Zilker Ballroom 4

Senior Member Summary Talks 2

6: Compile!
Pierre Marquis

7: Semantic Representation
Lenhart Schubert

8: Achieving Intelligence Using Prototypes, Composition, and Analogy
Vinay K. Chaudhri