Twenty-Eighth AAAI Conference
on Artificial Intelligence (AAAI-14)

Twenty-Sixth Conference on Innovative
Applications of Artificial Intelligence (IAAI-14)

Fifth Symposium on Educational Advances
in Artificial Intelligence (EAAI-14)

July 27 – 31, 2014
Québec Convention Centre
Québec City, Québec, Canada

Sponsored by the
Association for the Advancement of Artificial Intelligence

Cosponsored by the AI Journal, National Science Foundation,
Microsoft Research, Google, Amazon, Disney Research, IBM Research,
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Yahoo Labs!, and David E. Smith

In cooperation with the Cognitive Science Society and ACM/SIGAI

Conference Program

Contents

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AAAI-14 Conference Committee

AAAI acknowledges and thanks the following individuals for their generous contributions of time and energy to the successful creation and planning of the AAAI-14, IAAI-14, and EAAI-14 Conferences.

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Andrea Danyluk (Williams College, USA)
Adele Howe (Colorado State University, USA)

Awards

AAAI-14 Awards

The AAAI-14 Awards will be presented in Hall 200 A on July 29, from 8:30 – 9:00 AM by program cochairs Carla Brodley and Peter Stone.

AAAI-14 Outstanding Paper Award

This year, AAAI's Program Cochairs have selected five finalists for the AAAI-14 Outstanding Paper Award, which honors papers that exemplify high standards in technical contribution and exposition. Candidate papers for the AAAI-14 awards were selected based on overall ratings and nominations by members of the AAAI-14 Program Committee. The winner of the award will be selected by a panel of senior program committee members and chairs based on oral and poster presentations at the conference in Québec City, as well as final papers that appear in this proceedings. Papers will be judged on scientific quality of the research, especially as it can be appreciated by a broad AAAI audience.

The finalists for the AAAI-14 Outstanding Paper Award are:

Recovering from Selection Bias in Causal and Statistical Inference
Elias Bareinboim, Jin Tian, Judea Pearl

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

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

Tractability through Exchangeability: A New Perspective on Efficient Probabilistic Inference
Mathias Niepert, Guy Van den Broeck

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

Outstanding Program Committee Members

Each year, AAAI recognizes several outstanding program committee and senior program committee members. These individuals have gone above and beyond the expectations for the role, showing exceptional judgment, clarity, knowledgeability, and leadership in reaching a consensus decision.

Outstanding Senior Program Committee Members

Adele Howe (Colorado State University, USA)
Malte Helmert (University of Basel, Switzerland)
Dragos Margineantu (Boeing, USA)

Outstanding Program Committee Members

Johannes Fürnkranz (TU Darmstadt, Germany)
Andrey Kolobov (Microsoft Research, USA)
Ulle Endriss (ILLC, University of Amsterdam, Netherlands)
Umberto Grandi (University of Padova, Italy)

IAAI-14 Deployed Applications Awards

The seven IAAI-14 Deployed Application Awards will be announced by the IAAI-14 chair David Stracuzzi and cochair David Gunning. Please see the schedule for paper titles. Certificates will be presented during paper sessions.

AAAI Presidential Address:

AI and AAAI: Fascinating Research and Engaged Community

Manuela Veloso (Carnegie Mellon University)
Introduction by Henry Kautz
Wednesday, July 30, 1:00 PM – 2:00 PM Hall 200A

AI research and development are currently in great demand. As we experience an enormous increase in a wide variety of cyber-physical-social systems and the goals to make them increasingly intelligent, AI is needed in all its multiple and varied technical facets. The talk will make the case for the need of an increased integration of our worldwide research, development, and organizational efforts and initiatives. Highlights of the past, of the recent present, and proposed directions for the future of AAAI will be presented. The talk will include and acknowledge input from the AAAI office, members, and current and past leadership.

Manuela Veloso is the Herbert Simon University Professor at Carnegie Mellon University. She researches in artificial intelligence and robotics, in particular on agents that collaborate, observe, reason, act, and learn (CORAL group). She is a Fellow of AAAI, IEEE, and AAAS. Veloso cofounded RoboCup, a worldwide initiative investigating teams of autonomous robots in highly uncertain environments. With her students, realizing that autonomous robots inevitably have limitations in perception, cognition, and action, Veloso introduced symbiotic autonomous robots that can proactively ask for help from humans, other AI agents, and the web. Her symbiotic CoBot robots have serviced and traversed more 500 kilometers at CMU.

Robert S. Engelmore Memorial Award and Lecture

The Robert S. Engelmore Award is sponsored by IAAI-14 and AI Magazine, and will be presented by David Stracuzzi and David Gunning, IAAI-14 chair and cochair, and David B. Leake, editor-in-chief, *AI Magazine.* The award and lecture was established in 2003 to honor Dr. Engelmore's extraordinary service to AAAI, *AI Magazine,* and the AI applications community, and his contributions to applied AI. The 2014 award will be presented to Craig Knoblock (University of Southern California) for seminal contributions to machine learning and information integration, high-impact deployed applications and open-source projects, and extensive service to AAAI and international AI. The lecture will be held Tuesday, July 29, 9:00 AM, in Hall 200A on the 2nd level of the Québec Convention Centre. (See lecture description on page 9.)

IJCAI-JAIR Best Paper Award

The IJCAI-*JAIR* Best Paper Prize is awarded annually to an outstanding paper published in *JAIR* in the preceding five calendar years. The prize will be presented by Craig Boutilier, editor-in-chief, *JAIR.* The Prize Committee is comprised of associate editors and members of the *JAIR* Advisory Board. Their decision is based on both the significance of the paper and the quality of presentation. The winners of the prize receive certificates and an award of $500. Funding for the award is provided by the International Joint Conferences on Artificial Intelligence. The 2014 winners are:

Evgeniy Gabrilovich and Shaul Markovitch (2009). Wikipedia-Based Semantic Interpretation for Natural Language Processing, Volume 34, pages 443-498.

Honorable Mention

Joel Veness, Kee Siong Ng, Marcus Hutter, William Uther and David Silver (2011). A Monte-Carlo AIXI Approximation, Volume 40, pages 95-142.

AAAI Honors and Special Awards

AAAI Honors and Special Awards will be presented by Henry Kautz, Awards Committee chair and AAAI Past President, Manuela Veloso, AAAI president, and Thomas Dietterich, AAAI president-elect.

2014 AAAI Fellows Recognition

Each year, the Association for the Advancement of Artificial Intelligence recognizes a small number of members who have made significant sustained contributions to the field of artificial intelligence, and who have attained unusual distinction in the profession. AAAI is pleased to announce the nine newly elected Fellows for 2014, who will be honored during the annual Fellows dinner on Monday, July 28:

Carla E. Brodley (Northeastern University, USA)
Jonathan Gratch (USC Institute for Creative Technologies, USA)
Michael N. Huhns (University of South Carolina, USA)
Kevin Knight (Information Sciences Institute, University of Southern California, USA)
James C. Lester (North Carolina State University, USA)
Chih-Jen Lin (National Taiwan University, USA)
Sridhar Mahadevan (University of Massachusetts Amherst, USA)
Mark Maybury (The MITRE Corporation, USA)
David C. Parkes (Harvard University, USA)

Senior Member Recognition

AAAI is pleased to announce the 2014 AAAI senior members, who are being recognized for their long-term participation in AAAI and their distinction in the field of artificial intelligence.

Juan Carlos Augusto (Middlesex University, UK)
Vinay K. Chaudhri (SRI International, USA)
Peter E. Clark (Allen Institute for Artificial Intelligence, USA)
Robin Cohen (University of Waterloo, Canada)
David W. Franke (Vast.com, USA)
Alex A. Freitas (University of Kent, UK)
Judy Goldsmith (University of Kentucky, USA)
Jeff Heflin (Lehigh University, USA)

Social Events

Opening Reception

Monday, July 28, 6:00 – 7:00 PM
Hall 200C of the Québec Convention Centre.

The AAAI-14 Opening Reception will provide the traditional opportunity for attendees to socialize in a relaxed setting prior to the beginning of the technical program. A variety of hors d'oeuvres and one complimentary beverage will be served. A no-host bar will also be available. Admittance to the reception is included in the AAAI-14 technical registration. A $55.00 per person fee ($30.00 for children) will be charged for guests and other nontechnical conference registrants. The reception will be followed immediately by the Joint AAAI-14/IAAI-14 Invited Talk by Adam Cheyer at 7:30 PM in Hall 200A.

AAAI-14 Conference Fête

The AAAI-14 Conference Fête will be held Tuesday evening, July 29, 7:30 PM – 10:30 PM at Le Théâtre Capitole and Le Cabaret du Capitole de Québec, 972 Rue Saint-Jean, Québec, QC G1R 1R5, a 5 minute walk from the Convention Center. Established in 1903 and located in the heart of Old Québec, this unique urban architectural building is considered the loveliest banquet hall in Québec City. The connecting Cabaret is the old Cinema de Paris and has a charming Art Deco style. A jazz trio will perform, and heavy hors d'oevres and desserts will be served along with a complimentary beverage. Your admittance to the AAAI-14 Conference Fete is included in your conference registration. Guests and children are welcome to attend for a guest fee of $100.00 per person.

AAAI-14 Poster Sessions

This year, there will be three poster sessions (one each day) with scheduled presentations by plenary session technical presenters and authors of papers presented in poster format only. However, all accepted technical papers will be presented in poster format and will be available throughout the technical program, beginning at 2:00 PM on Tuesday, July 29 in Hall 200C.

The Tuesday, July 29, early evening poster session, to be held at 5:30 – 7:00 PM, will also include Student Abstracts, Doctoral Consortium Abstracts, EAAI-14 posters, and Poker Competition posters. (For a complete listing of posters, please refer to page 23.) The reception originally scheduled at this time has been moved to Wednesday, July 30, 6:00 – 7:15 PM (see Fun and Games Night below).

CRA-W/CDC Broadening Participation in AI — AAAI-14 Women's Lunch

Tuesday, July 29, 11:50 AM – 1:00 PM
Room 206A/B

AAAI, in cooperation with *AI Journal* and CRA-W/CDC, is pleased to host the first Women's Lunch. This lunch is one component of the CRA-W/CDC Broadening Participation in AI program. Other components of this program include an afternoon workshop on Monday, July 28 (Room 204A), and a breakfast on Thursday, July 31 (Room 205A), both of which are by invitation only. The main goal of this program is to increase participation of women and members of other underrepresented groups in Artificial Intelligence by providing community building and networking sessions as well as career mentoring advice. Participants will have ample opportunities to interact with established researchers, to network with other participants, and to receive mentoring about career planning and career options. Pre-registration was required for the lunch.

AAAI Fun and Games Night / Wednesday Evening Buffet

Wednesday, July 30, 7:30 PM – 10:30 PM
Room 206A/B

Pasta Station, 6:00 PM – 7:15 PM
Hall 200C

The very successful 2013 Puzzle Hunt will be followed up this year by an evening of activities designed to boggle the mind and create lots of fun! Join us for AI Bingo, AI Family Feud, board games, and more! Fun and Games Night will be preceded by a Pasta Station Buffet from 6:00 – 7:15 PM in Hall 200C. A $35.00 per person fee ($15.00 for children) will be charged for guests and other nontechnical conference registrants attending the Wednesday Evening Buffet.

AAAI Speed Dating

Wednesday, July 30, 5:00 PM – 6:00 PM
Room 206A/B

Meet someone new! The president of AAAI. The president of IJCAI. The editor-in-chief of *AI Magazine.* The editors-in-chief of the *AI Journal.* Or one of your colleagues from down the hall. We are pleased to present the inaugural AAAI speed date. It's sure to be a fun hour with drinks and nibbles, a welcome gift, and a free raffle for a Nexus 7 and other goodies. We'll be using ancient Chinese astrological information as a means of organizing the dates. Doors open at 5:00 PM sharp. There will be no admittance after 5:10 PM, and admittance is limited to the first 240 people to arrive. It's sure to be a great opportunity to network, and to receive or give mentoring and career advice.

Robert R. Hoffman (Institute for Human and Machine Cognition, USA)
Vasant Honavar (The Pennsylvania State University, USA)
Lawrence E. Hunter (University of Colorado School of Medicine, USA)
Froduald Kabanza (Universite de Sherbrooke, Canada)
James Liu (Hong Kong Polytechnic University, Hong Kong)
Cindy Marling (Ohio University, USA)
David L. Martin (Nuance Communications, Inc., USA)
Maja J. Mataric (University of Southern California, USA)
Alice M. Mulvehill (Memory Based Research, LLC, USA)
Lin Padgham (RMIT University, Australia)
Lynne E. Parker (University of Tennessee, USA)
Gerald Penn (University of Toronto, Canada)
William C. Regli (Drexel University, USA)
Sandip Sen (University of Tulsa, USA)
Miroslav N. Velev (Aries Design Automation, LLC, USA)
John Yen (The Pennsylvania State University, USA)
Zhi-Hua Zhou (Nanjing University, China)

Classic Paper Award

The 2014 AAAI Classic Paper award honors the following authors of paper(s) deemed most influential from the Thirteenth National Conference on Artificial Intelligence, held in 1996 in Portland, Oregon.

2014 AAAI Classic Paper Awards

Michael Pazzani will present a talk on Tuesday, July 29, at 11:35 AM, Room 303A, third level.

2014 Classic Paper Award
Syskill & Webert: Identifying Interesting Web Sites
Michael J. Pazzani, Jack Muramatsu and Daniel Billsus
For significant contributions to the field of personalizing Internet content and learning user profiles.

Honorable Mention
Estimating the Absolute Position of a Mobile Robot Using Position Probability Grids
Wolfram Burgard, Dieter Fox, Daniel Hennig, and Timo Schmidt
For significant contributions to solving the problem of self-localization of mobile robots.

Pushing the Envelope: Planning, Propositional Logic, and Stochastic Search
Henry Kautz and Bart Selman
For establishing satisfiability testing as a wide-ranging method for solving planning problems.

Distinguished Service Award

The AAAI Distinguished Service award recognizes one individual each year for extraordinary service to the AI community. The 2014 recipient is David B. Leake, Indiana University, who is being recognized for his outstanding work as editor-in-chief of *AI Magazine,* the journal of record for the AI community, for more than 15 years, his sustained service as AAAI publications chair, and his seminal work and service in the case-based reasoning and learning communities.

Morning	Afternoon	Evening
Sunday, July 27		
Tutorial Forum Workshops AAAI/SIGAI DC Robotics	Tutorial Forum Workshops AAAI/SIGAI DC Robotics	
Monday, July 28		
Tutorial Forum Workshops AAAI/SIGAI DC EAAI-14 CRA-W/CDC Workshop Robotics	AAAI Business Meeting Tutorial Forum Workshops AAAI/SIGAI DC EAAI-14 CRA-W/CDC Workshop Robotics	Opening Reception AAAI/IAAI Joint Talk: Cheyer Fellows Dinner
Tuesday, July 29		
AAAI / IAAI Opening Ceremony / Awards and Honors IAAI RSE Talk: Knoblock What's Hot / Classic Paper Talks AAAI/IAAI/EAAI Technical Program Robotics/Exhibits	Women's Lunch AAAI Posters Available AAAI Talks: Kearns and Breazeal AAAI/IAAI/EAAI Technical Program Robotics/Exhibits	Scheduled Poster Session + Students, EAAI, Poker AAAI-14 Conference Fête
Wednesday, July 30		
IAAI Talk: Kaplan Senior Member / What's Hot Papers AAAI/IAAI Technical Program AAAI Posters Available Robotics/Exhibits	Presidential Address: Veloso AAAI/IAAI Technical Program Scheduled Poster Session Robotics/Exhibits	Speed Dating Pasta Station Buffet Fun & Games Night
Thursday, July 31		
Senior Member / What's Hot Papers / IJCAI-*JAIR* Award Talk AAAI Talk: Tambe AAAI/IAAI Technical Program AAAI Posters Available Robotics/Exhibits	AAAI Community Meeting AAAI Talk: Smyth AAAI/IAAI Technical Program Scheduled Poster Session	AI Video Competition Awards

The Fifth Symposium on Educational Advances in AI (EAAI-14)

EAAI-14

Monday – Tuesday, July 28 – 29
Room 203

EAAI-14 provides a venue for researchers and educators to discuss pedagogical issues and share resources related to teaching AI and using AI in education across a variety of curricular levels (K-12 through postgraduate training), with a natural emphasis on undergraduate and graduate teaching and learning. The symposium will explore how to more effectively teach AI, as well as how themes from AI may be used to enhance education more broadly. EAAI-14 features a technical program, a poster program as part of the poster reception on Tuesday evening, and a "Model AI" session highlighting innovative, ready-to-adopt materials. EAAI-14 is included in the AAAI-14 technical registration fee, but an EAAI-14 only registration option is also available.

EAAI-14 Program Schedule

(Please consult www.cs.mtu.edu/~lebrown/eaai/ for any last-minute schedule updates.)

Monday, July 28, 2014

9:30 – 10:40 AM — *Opening and Invited Talk*

Welcome
Laura Brown and Todd Neller, EAAI-14 Cochairs

EAAI-14 Invited Talk
Michael Littman

10:40 – 11:00 AM — *Coffee Break*

11:00 – 12:00 PM — *Paper Session*

Shallow Blue: Lego-Based Embodied AI as a Platform for Cross-Curricular Project Based Learning
Robert Selkowitz, Debra T. Burhans

DOROTHY: Enhancing Bidirectional Communication between a 3D Programming Interface and Mobile Robots — Teaching with Watson
Emilie Featherston, Mohan Sridharan, Susan Urban, Joseph Urban

Teaching with Watson
Michael Wollowski

1:30 – 2:30 PM — *Model AI Assignments Session*

An Introduction to Monte Carlo Techniques in AI — Part I
Todd W. Neller

Multi-Player Games: Introducing Assignments with Open-Ended Strategies in CS2
James Heliotis, Sean Strout, Ivona Bezáková

Strimko by Resolution
Bikramjit Banerjee, Daniel Thompson

2:30 – 3:30 PM — *Model AI Assignments Session*

Party Affiliation Classification from State of the Union Addresses
Laura E. Brown

Comparing Brute-Force Searching versus the MRV Heuristic in Sudoku Puzzles
Roger L. West

3:30 – 4:00 PM — *Coffee Break*

4:00 – 4:30 PM — Poster Spotlight

Jim: A Platform for Affective AI in an Interdisciplinary Setting
Robert Selkowitz, Michael Heilemann, Jon Mrowczynski

Easychair as a Pedagogical Tool Engaging Graduate Students in the Reviewing Process
Kartik Talamadupula, Subbarao Kambhampati

4:30 – 5:00 PM

EAAI Big Ideas Discussion

Tuesday, July 29, 2014

8:30 – 9:00 AM

AAAI-14 Opening Ceremony and Awards

9:00 – 10:00 AM

IAAI-14 Robert S. Engelmore Award Lecture
Craig Knoblock

10:00 – 10:20 AM — *Coffee Break*

10:20 – 11:40 AM

Teaching and Mentoring Workshop, Part I

The workshop brings attendees together in an engaging, interative setting to discuss and share creative teaching strategies and facilitate the creation of professional contacts and mentoring relationships.

2:10 – 2:50 PM

Teaching and Mentoring Workshop, Part II

2:50 – 3:40 PM

Networking and Brainstorming Session

3:40 – 4:00 PM — *Coffee Break*

4:00 – 10:30 PM — *AAAI Program*

Invited Talk, Plenary Session, Poster Session

AAAI-14 Student Programs

AAAI-14 Student Abstract and Poster Program

This program provides a forum in which students can present and discuss their work during its early stages, meet some of their peers who have related interests, and introduce themselves to more senior members of the field. The Student Poster session will be held Tuesday, July 29, 5:30 – 7:00 PM in Hall 200B.

AAAI Fellow / Student Lunches

First held in 2006, this program provides an opportunity for a small number of students to chat with a AAAI Fellow over an informal lunch during the conference. Sign-up sheets are available at the onsite registration desk in the Convention Center. Students should meet their designated Fellow in onsite registration on their assigned day.

AAAI/SIGAI Doctoral Consortium (DC-14)

The Nineteenth AAAI/SIGAI Doctoral Consortium program will be held on Sunday and Monday, July 27 - 28, in 206B. The Doctoral Consortium provides an opportunity for a group of Ph.D students to discuss and explore their research interests and career objectives in an interdisciplinary workshop together with a panel of established researchers. The sixteen students accepted to participate in this program will also participate in the AAAI-14 evening Poster Session on Tuesday, July 29. All interested AAAI-14 student registrants are invited to observe the presentations and participate in discussions at the workshop. AAAI and SIGAI gratefully acknowledge grants from the National Science Foundation and David E. Smith, providing partial funding for this event. The final schedule is available at eecs.wsu.edu/~taylorm/aaai2014-dc/

AI Video Competition Awards

The Eighth AI Video Competition Awards Ceremony will be held immediately following the poster session on Thursday, July 31, from 5:30 – 6:30 PM in the Main Hall, Foyer 4, Loggia. Authors of award-winning videos will be presented with Shakey trophies that honor SRI's Shakey robot and its pioneering video. Award winning videos will be screened at the ceremony. The objective of this competition is to communicate to the world the fun of pursuing research in AI, and illustrate the impact of some of our applications. Submitters were asked to create narrated videos of 1-5 minutes in length.

The submissions were reviewed by an international program committee, led by cochairs Mauro Birattari (Université Libre de Bruxelles, Belgium) and Sabine Hauert (University of Bristol, UK). Awards will be presented in the following categories: Best Video, Best Short Video, Best Student Video, Best Robot Video, and Most Entertaining Video. AAAI gratefully acknowledges the *AI Journal* Review Board for its donation and the DMRC of the University of Paderborn, Germany, for help with the manufacturing of the awards.

Computer Poker Competition & Workshop

The AAAI Annual Computer Poker Competition showcases state-of-the-art intelligent programs for playing poker. The 2014 competition will consist of four poker variants — two-player Texas Hold'em with both limit and no-limit betting structures, three-player limit Texas Hold'em, and three-player Kuhn poker. With many interesting challenges in all four categories, we expect this year's competition to continue to spur the development of new techniques for playing large games of imperfect information. The accompanying 2014 Computer Poker Workshop (W4) that will take place on Sunday, July 27 in 205A will provide a forum where researchers studying computer poker and other games of imperfect information can share current research and gather ideas about how to improve the state of the art and advance AI research in these areas. The results of the 2014 AAAI Annual Computer Poker Competition will be announced during the workshop. Some poster authors will present their work at the AAAI-14 poster reception on Tuesday evening, 5:30 – 7:00 PM, Hall 200B.

Special Meetings

AAAI Business Meeting

The AAAI Annual Business Meeting will be held Monday, July 28, 1:15 – 1:45 PM, Room 301A. All AAAI members are welcome.

AAAI Community Meeting

Please join us for a community meeting! We invite you to join the AAAI Executive Council members, and bring your thoughts and ideas for the future of AAAI! The gathering will be held Thursday, July 31, 12:00 – 1:00 PM in Room 301A. Everyone is welcome!

AAAI Conference Committee Meeting

AAAI Conference Committee Meeting will be held Thursday, July 31, 7:45 – 8:45 AM in the Hilton Québec.

AAAI Executive Council Meeting

The AAAI Executive Council Meeting will be held Monday, July 28, 9:00 PM – 4:00 PM, Solarium, 3rd Level. Continental breakfast will be available at 8:30 AM.

AAAI Publications Committee Meeting

The AAAI Publications Committee Meeting will be held Wednesday, July 30, 7:45 – 8:45 AM in the Hilton Québec.

AI Journal Editorial Board Meeting

The *AI Journal* Editorial Board Meeting will be held Wednesday, July 30, 12:00 PM – 1:00 PM in the Solarium, 3rd Level.

AI Magazine Editorial Board Meeting

The *AI Magazine* Editorial Board Meeting will be held Tuesday, July 29, 12:00 - 1:00 PM, Solarium, 3rd Level.

JAIR Editorial Board Meeting

The JAIR Editorial Board Meeting will be held Thursday, July 31, 12:00 – 2:00 PM, Solarium, 3rd Level.

AAAI/CogSci Robotics Exhibition

Saturday, July 26 – Thursday, July 31, Room 202

AAAI and the Cognitive Science Society invite you to visit the joint AAAI/CogSci Robotics Exhibition. The exhibition is an opportunity to view robot systems and demonstrations that highlight advances in the last five years. Teams representing the following institutions will participate in the exhibition:

Canisius College

Contact: Debra Burhans

Institute for Robotics and Mechatronics / University of Toronto

Robot Name: The Socially Assistive Robot Tangy
Contact: Goldie Nejat

Did anyone say Bingo? The mobile socially assistive robot, Tangy, is currently being developed to provide cognitive and social interventions to elderly residents in long-term care facilities. Presently, the robot focuses on assisting multiple residents in the group-based recreational activity of Bingo. Tangy is capable of autonomously: 1) planning and scheduling Bingo games based on the schedules of the residents, and 2) facilitating and promoting engagement in these games. Come join us at the exhibition to experience a one-on-one Bingo game facilitated by our robot Tangy and see how the robot can assist users during the game. We will also present other exciting robots being developed at IRM.

Social Robotics Lab at Yale University

Contact: Larissa Hall

INRIA/ENSTA-Paristech

Robot Name: Poppy Project
Team Name: Flowers
Contacts: Pierre-Yves Oudeyer, Jonathan Grizou, Nicolas Jahier

The Poppy Project develops an open-source 3D printed humanoid platform based on robust, flexible, easy-to-use and reproduce hardware and software. In particular, the use of 3D printing and rapid prototyping technologies is a central aspect of this project, and makes it easy and fast not only to reproduce the platform, but also to explore morphological variants. Poppy targets three domains of use: science, education and art. It was designed to be a new experimental platform opening the possibility to systematically study the role of morphology in sensorimotor control, in human-robot interaction and in cognitive development.

University of Michigan

Robot Name: Rosie
Team Name: University of Michigan Soar Group
Contact: John Laird

Come see Rosie learn new tasks and games in real time from natural language instruction. Rosie is the first robot to demonstrate on-line interactive task learning of several different tasks from scratch. Rosie is built on the Soar cognitive architecture and learns colors, shapes, sizes, prepositions, verbs, and task from restricted natural language. It also learns new games such as Tic-Tac-Toe and Tower of Hanoi. Rosie also addresses challenges that arise at the interface of robotics and AI including cognitively driven object tracking, knowledge-rich machine learning with sparse data, and game-play in the physical world.

AAAI-14 / IAAI-14 Invited Talks

All AAAI-14 and IAAI-14 Invited Talks, July 29 – 31 will be held in Hall 200A Second Level, unless otherwise noted.

Monday, July 28

7:30 PM – 8:30 PM, Hall 200A
IAAI / AAAI Joint Invited Talk
Siri: Back to the Future

> *Adam Cheyer*
> (Please see full description on page 9)

Tuesday, July 29

8:30 AM – 9:00 AM
AAAI-14 / IAAI-14 Opening Ceremony
AAAI Welcome and Award Presentations

> *Carla Brodley and Peter Stone, AAAI-14 Program Cochairs*

IAAI Welcome and Award Presentations

> *David Stracuzzi, IAAI-14 Conference Chair; David Gunning, IAAI-14 Program Cochair; and David Leake, AI Magazine Editor-in-Chief*

IJCAI–JAIR Best Paper Award Presentations

> *Craig Boutilier, Editor-in-Chief, JAIR*

Fellows Announcement, Senior Member Recognition, AAAI Classic Paper Award, Distinguished Service Award

> *Henry Kautz, AAAI Past President and Awards Committee Chair; Manuela Veloso, AAAI President; and Thomas Dietterich, AAAI President-Elect*

9:00 AM – 10:00 AM
AAAI 2014 Robert S. Engelmore Award Lecture
From Virtual Museums to Peacebuilding: Creating and Using Linked Knowledge

> *Craig A. Knoblock (University of Southern California)*
> (Please see full description on page 9)

1:00 PM – 2:00 PM
AAAI-14 Invited Talk
Behavioral Network Science

> *Michael Kearns (University of Pennsylvania)*
> Introduction by Peter Stone

For a number of years, we have been conducting human subject experiments on collective and individual behavior and performance in social networks. These experiments have investigated diverse competitive, cooperative and computational tasks that include graph coloring, voting, trading and viral marketing under a wide variety of network structures. In this talk I will survey these experiments and their findings, emphasizing the questions they raise for multi-agent systems, machine learning, and other disciplines.

4:00 PM – 5:00 PM
AAAI-14 Invited Talk
Invited Talk

> *Cynthia Breazeal (Massachusetts Institute of Technology)*
> Introduction by Carla Brodley

Cynthia Breazeal is an Associate Professor at MIT where she founded and directs the Personal Robots Group at the Media Lab. She is recognized as a key pioneer of Social Robotics and Human Robot Interaction. Her research spans both the creation of intelligent and socially responsive robots, as well as studying their impact on contributing to people's quality of life across early childhood learning, creativity, health, telecommunications, and play. She has authored the book "Designing Sociable Robots" and has published over 100 peer-reviewed articles. She has presented at TED, is a recipient of Technology Review's TR100/TR35 Award, TIME magazine's Best Inventions, and was honored as finalist in the National Design Awards in Communication. She received her doctoral degree from MIT in 2000.

Wednesday, July 30

9:00 AM – 10:00 AM
IAAI-14 Invited Talk
The Conversational User Interface

> *Ron Kaplan (Nuance Communications, Inc.)*
> Introduction by David Stracuzzi

Work on both the graphical user interface (GUI) and the conversational user interface (CUI) started at about the same time, about 40 years ago. The GUI was a lot easier to implement, and it made computing and information resources available to ordinary people. But over the years it has lost much of its simplicity and charm. The CUI has taken many more years to develop, requiring major scientific and engineering advances in speech, natural language processing, user-modeling, and reasoning, not to mention increases in cost-effective computation. But the infrastructure is now in place for the creation and widespread distribution of conversational interfaces. This talk describes some natural modes of conversational interaction and some of the supporting technologies that are now under development.

1:00 PM – 2:00 PM
AAAI-14 Presidential Address
AI and AAAI: Fascinating Research and Engaged Community

> *Manuela M. Veloso (Carnegie Mellon University)*
> (Please see full description on page 3)

Thursday, July 31

10:15 AM – 11:15 AM
AAAI-14 Invited Talk
Game Theory for Security: Key Algorithmic Principles, Deployed Applications, Research Challenges

> *Milind Tambe (University of Southern California)*
> Introduction by Peter Stone

Security is a global concern, requiring efficient, randomized allocation and scheduling of limited security resources. To that end, we have used computational game theory to build decision aids for security agencies around the world. These decision aids are in use by agencies such as the US Coast Guard for protection of ports and ferry traffic, and the Federal Air Marshals Service and LAX police for protecting air traffic; our game-theoretic algorithms are also under evaluation for suppression of urban crime and for protection of wildlife and fisheries. I will overview my group's research in this growing area of security games.

1:30 PM– 2:30 PM
AAAI-14 Invited Talk
Invited Talk

> *Padhraic Smyth (University of California, Irvine)*
> Introduction by Carla Brodley

Padhraic Smyth received a first class honors degree in Electronic Engineering from National University of Ireland (Galway) in 1984, and the MSEE and PhD degrees (in 1985 and 1988 respectively) in Electrical Engineering from the California Institute of Technology. From 1988 to 1996 he was a technical group leader at the Jet Propulsion Laboratory, Pasadena, and has been on the faculty at UC Irvine since 1996, where he is a professor in the Department of Computer Science and the Department of Statistics, and is director of the Center for Machine Learning and Intelligent Systems. His research interests include machine learning, pattern recognition, and applied statistics. He is an ACM Fellow (2013), a AAAI Fellow (2010), and a recipient of the ACM SIGKDD Innovation Award (2009). He is co-author of the text Principles of Data Mining (with David Hand and Heikki Mannila in 2001), and served as program chair of the UAI 2014 and ACM SIGKDD 2011 conferences. In addition to his academic research he is also active in industry consulting and has worked with companies such as Samsung, eBay, Yahoo!, Microsoft, Oracle, Nokia, and AT&T, as well as serving as an academic advisor to Netflix for the Netflix prize competition from 2006 to 2009.

Siri: Back to the Future

Adam Cheyer
Introduction by David Gunning
Monday, July 28, 7:30 PM – 8:30 PM, Hall 200A

Siri is the virtual personal assistant resident inside hundreds of millions of Apple devices. Ask Siri to buy you a movie ticket, make a restaurant reservation, send a message or a tweet, or get the score of the big game and Siri will help you get the job done quickly and easily, through a conversational interaction. People often ask me, "What technology is really behind Siri" and "What's next for Siri?" As a former Apple employee, I'm not at liberty to talk about either of these questions. However, without saying anything related to Apple's system or roadmaps, I can describe the past, explaining what got left "on the cutting room floor" as Siri moved forward from research to commercialization up to an eventual acquisition by Apple. In this talk, I will present the technology and features behind a lineage of systems leading towards Apple's Siri: OAA, Vanguard, CALO, Active, the startup Siri. We will do it in reverse: the farther we go back in time, the more futuristic each version gets, with fantastic capabilities not available in any later version. As Steve Jobs famously said, "You can't connect the dots looking forward, you can only connect them looking backwards..."

From Virtual Museums to Peacebuilding: Creating and Using Linked Knowledge

Craig A. Knoblock (University of Southern California)
Introduction by David Leake
Tuesday, July 29, 9:00 AM – 10:00 AM, Hall 200A Second Level

Companies, such as Google and Microsoft, are building web-scale linked knowledge bases for the purpose of indexing and searching the web, but these efforts do not address the problem of building accurate, fine-grained, deep knowledge bases for specific application domains. We are developing an integration framework, called Karma, which supports the rapid, end-to-end construction of such linked knowledge bases. In this talk I will describe machine-learning techniques for mapping new data sources to a domain model and linking the data across sources. I will also present several applications of this technology, including building virtual museums and integrating data sources for peacebuilding.

Senior Member Presentations

In the AAAI-14 "Senior Member Presentation" track established researchers provide broad talks on a well-developed body of research or an important new research area. These presentations provided a "big picture" view, in contrast to the regular contributions that focus on a specific contribution. The eleven senior member presentations are scheduled Wednesday and Thursday mornings, just prior to the commencement of the technical paper talks, and are listed in the schedule on pages 10–21.

What's Hot Talks

The AAAI-14 "What's Hot" track aims to present exciting recent advances and current challenges in subareas of Artificial Intelligence with major conferences of their own. In addition, the program features speakers from areas that are "hot" but do not have a conference of their own yet. In this category are Ken Barker's talk on Challenges beyond Factoid Question Answering and Volodymyr Mnih's talk on What's Hot in Reinforcement Learning. The "What's Hot" presentations are scheduled on Tuesday at 11:35, and on Wednesday and Thursday mornings, just prior to the commencement of the technical paper talks. The talks are listed in the schedule on pages 10–21.

Registration

Conference registration is located on the second level of the Québec Convention Center, beginning Sunday, July 27. Registration hours are:

Sunday, July 27	7:30 AM – 5:00 PM
Monday, July 28	7:30 AM – 5:00 PM
Tuesday, July 29	8:00 AM – 5:00 PM
Wednesday, July 30	8:30 AM – 5:00 PM
Thursday, July 31	8:30 PM – 12:00 PM

AAAI attendees who wish to register onsite will be asked to complete an onsite form, and then process their own registration at the AAAI-14 registration site: www.regonline.com/aaai14 within the following 24-hour period. They will be issued a badge at the time that they complete the form. For a list of registration rates, please see aaai.org/AAAI14 or visit onsite registration. Attendees who select not to use the online system will be required to pay by check or cash onsite.

	HALL 200A	301A	301B	302A
8:30 – 9:00 AM	**AAAI-14 / IAAI-14 Opening Ceremony** AAAI Welcome and Award Presentations *Carla Brodley and Peter Stone, AAAI-14 Program Cochairs* IAAI Welcome and Award Presentations *David Stracuzzi, David Gunning, David Leake* IJCAI-JAIR Best Paper Award Presentations *Craig Boutilier, Editor-in-Chief, JAIR* AAAI Special Awards: Fellows Announcement, Senior Member Recognition, AAAI Classic Paper Award, Distinguished Service Award *Henry Kautz, Manuela Veloso, Thomas Dietterich*			
9:00 – 10:00 AM	**IAAI 2014 Robert S. Engelmore Award Lecture** From Virtual Museums to Peacebuilding: Creating and Using Linked Knowledge *Craig A. Knoblock (University of Southern California) — Introduction by David Leake*	**Novel Machine Learning Algorithms** Representation Acquisition for Task-Level Planning *George Konidaris, Leslie Pack Kaelbling, Tomas Lozano-Perez* Imitation Learning with Demonstrations and Shaping Rewards *Kshitij Judah, Alan Fern, Prasad Tadepalli, Robby Goetschalckx* Spectral Thompson Sampling *Tomáš Kocák, Michal Valko, Remi Munos, Shipra Agrawal* *Best Paper Nominee:* Manifold Learning for Jointly Modeling Topic and Visualization *Tuan M. V. Le, Hady W. Lauw*	**Knowledge Representation and Reasoning** The Complexity of Reasoning with FODD and GFODD *Benjamin J. Hescott, Roni Khardon* Querying Inconsistent Description Logic Knowledge Bases under Preferred Repair Semantics *Meghyn Bienvenu, Camille Bourgaux, François Goasdoué* The Computational Complexity of Structure-Based Causality *Gadi Aleksandrowicz, Hana Chockler, Joseph Y. Halpern, Alexander Ivrii* A Knowledge Compilation Map for Ordered Real-Valued Decision Diagrams *Helene Fargier, Pierre Marquis, Alexandre Niveau, Nicolas Schmidt*	**Search and Constraint Satisfaction** Boosting SBDS for Partial Symmetry Breaking in Constraint Programming *Jimmy H. M. Lee, Zichen Zhu* Linear-Time Filtering Algorithms for the Disjunctive Constraint *Hamed Fahimi, Claude-Guy Quimper* Backdoors into Heterogeneous Classes of SAT and CSP *Serge Gaspers, Neeldhara Misra, Sebastian Ordyniak, Stefan Szeider, Stanislav Živný* A Support-Based Algorithm for the Bi-Objective Pareto Constraint *Renaud Hartert, Pierre Schaus*
	COFFEE BREAK, 10:00 – 10:20 AM			
10:20 – 11:35 AM		**Novel Machine Learning Algorithms** Wormhole Hamiltonian Monte Carlo *Shiwei Lan, Jeffrey Streets, Babak Shahbaba* Learning the Structure of Probabilistic Graphical Models with an Extended Cascading Indian Buffet Process *Patrick Dallaire, Philippe Giguère, Brahim Chaib-Draa* Small-Variance Asymptotics for Dirichlet Process Mixtures of SVMs *Yining Wang, Jun Zhu* Using the Matrix Ridge Approximation to Speedup Determinantal Point Processes Sampling Algorithms *Shusen Wang, Chao Zhang, Hui Qian, Zhihua Zhang* Large-Scale Optimistic Adaptive Submodularity *Victor Gabillon, Branislav Kveton, Zheng Wen, Brian Eriksson, S. Muthukrishnan*	**Planning and Scheduling** Parametrized Families of Hard Planning Problems from Phase Transitions *Eleanor G. Rieffel, Davide Venturelli, Minh Do, Itay Hen, Jeremy Frank* Backdoors to Planning *Martin Kronegger, Sebastian Ordyniak, Andreas Pfandler* Scheduling for Transfers in Pickup and Delivery Problems with Very Large Neighborhood Search *Brian Coltin, Manuela Veloso* A Scheduler for Actions with Iterated Durations *James Paterson, Eric Timmons, Brian C. Williams* *Best Paper Nominee:* Generalized Label Reduction for Merge-and-Shrink Heuristics *Silvan Sievers, Martin Wehrle, Malte Helmert*	**Game Theory and Multiagent Systems** Congestion Games for V2G-Enabled EV Charging *Benny Lutati, Vadim Levit, Tal Grinshpoun, Amnon Meisels* A Game-Theoretic Analysis of Catalog Optimization *Joel Oren, Nina Narodytska, Craig Boutilier* Robust Winners and Winner Determination Policies under Candidate Uncertainty *Craig Boutilier, Jérôme Lang, Joel Oren, Hector Palacios* Theory of Cooperation in Complex Social Networks *Bijan Ranjbar-Sahraei, Haitham Bou Ammar, Daan Bloembergen, Karl Tuyls, Gerhard Weiss* Prices Matter for the Parameterized Complexity of Shift Bribery *Robert Bredereck, Jiehua Chen, Piotr Faliszewski, André Nichterlein, Rolf Niedermeier*
11:35 – 11:50 AM		**What's Hot: ICAPS** Challenges in Planning *Rao Khambampati*	**What's Hot: AAMAS** What's Hot in Autonomous Agents *Noa Agmon*	
	LUNCH, 11:50 AM– 1:00 PM			

	302B	303A	303B	304A/B
8:30 – 9:00 AM				
9:00 – 10:00 AM	**NLP and Text Mining** Lifetime Lexical Variation in Social Media *Liao Lizi, Jing Jiang, Ying Ding, Heyan Huang, Ee-Peng Lim* Extracting Keyphrases from Research Papers Using Citation Networks *Sujatha Das Gollapalli, Cornelia Caragea* Detecting Information-Dense Texts In Multiple News Domains *Yinfei Yang, Ani Nenkova* Chinese Overt Pronoun Resolution: A Bilingual Approach *Chen Chen, Vincent Ng*	**Computational Sustainability and AI** *Best Paper Nominee:* Placement of Loading Stations for Electric Vehicles: No Detours Necessary! *Stefan Funke, André Nusser, Sabine Storandt* A Latent Variable Model for Discovering Bird Species Commonly Misidentified by Citizen Scientists *Jun Yu, Rebecca A. Hutchinson, Weng-Keen Wong* Intelligent System for Urban Emergency Management During Large-Scale Disaster *Xuan Song, Quanshi Zhang, Yoshihide Sekimoto, Ryosuke Shibasaki* Contextually Supervised Source Separation with Application to Energy Disaggregation *Matt Wytock, J. Zico Kolter*	**Game Theory and Economic Paradigms** A Control Dichotomy for Pure Scoring Rules *Edith Hemaspaandra, Lane A. Hemaspaandra, Henning Schnoor* False-Name Bidding and Economic Efficiency in Combinatorial Auctions *Colleen Alkalay-Houlihan, Adrian Vetta* Item Bidding for Combinatorial Public Projects *Evangelos Markakis, Orestis Telelis* Betting Strategies, Market Selection, and the Wisdom of Crowds *Willemien Kets, David M. Pennock, Rajiv Sethi, Nisarg Shah*	**IAAI 2014 Robert S. Engelmore Award Lecture (Hall 200A)** From Virtual Museums to Peacebuilding: Creating and Using Linked Knowledge *Craig A. Knoblock (University of Southern California) — Introduction by David Leake*
	COFFEE BREAK, 10:00 – 10:20 AM			
10:20– 11:35 AM	**AI and the Web** Who Also Likes It? Generating the Most Persuasive Social Explanations in Recommender Systems *Beidou Wang, Martin Ester, Jiajun Bu, Deng Cai* Leveraging Decomposed Trust in Probabilistic Matrix Factorization for Effective Recommendation *Hui Fang, Yang Bao, Jie Zhang* TopicMF: Simultaneously Exploiting Ratings and Reviews for Recommendation *Yang Bao, Hui Fang, Jie Zhang* Combining Heterogenous Social and Geographical Information for Event Recommendation *Zhi Qiao, Peng Zhang, Yanan Cao, Chuan Zhou, Li Guo, Bingxing Fang* Parallel Materialisation of Datalog Programs in Centralised, Main-Memory RDF Systems *Boris Motik, Yavor Nenov, Robert Piro, Ian Horrocks, Dan Olteanu*	**Human Computation and Crowd Sourcing** Acquiring Commonsense Knowledge for Sentiment Analysis through Human Computation *Marina Boia, Claudiu Cristian Musat, Boi Faltings* Signals in the Silence: Models of Implicit Feedback in a Recommender System for Crowdsourcing *Christopher H. Lin, Ece Kamar, Eric Horvitz* Online and Stochastic Learning with a Human Cognitive Bias *Hidekazu Oiwa, Hiroshi Nakagawa* Anytime Active Learning *Maria E. Ramirez-Loaiza, Aron Culotta, Mustafa Bilgic* Generating Content for Scenario-Based Serious-Games Using CrowdSourcing *Sigal Sina, Avi Rosenfeld, Sarit Kraus*	**Reasoning under Uncertainty** *Best Paper Nominee:* Recovering from Selection Bias in Causal and Statistical Inference *Elias Bareinboim, Jin Tian, Judea Pearl* *Best Paper Nominee:* Tractability through Exchangeability: A New Perspective on Efficient Probabilistic Inference *Mathias Niepert, Guy Van den Broeck* Lifting Relational MAP-LPs Using Cluster Signatures *Udi Apsel, Kristian Kersting, Martin Mladenov* Approximate Lifting Techniques for Belief Propagation *Parag Singla, Aniruddh Nath, Pedro Domingos* Explanation-Based Approximate Weighted Model Counting for Probabilistic Logics *Joris Renkens, Angelika Kimmig, Guy Van den Broeck, Luc De Raedt*	**IAAI Deployed Applications** *Session Chair: Ted Senator* *Deployed:* Evaluation and Deployment of a People-to-People Recommender in Online Dating *A. Krzywicki, W. Wobcke, Y. S. Kim, X. Cai, M. Bain, P. Compton, A. Mahidadia* *Deployed:* The Quest Draft: An Automated Course Allocation Algorithm *Richard Hoshino, Caleb Raible-Clark* *Deployed:* THink: Inferring Cognitive Status from Subtle Behaviors *Randall Davis, David J. Libon, Rhoda Au, David Pitman, Dana L. Penney*
11:35 – 11:50 AM		**Classic Paper Award** *2014 Classic Paper Award:* Syskill & Webert: Identifying Interesting Web Sites *Michael J. Pazzani, Jack Muramatsu and Daniel Billsus*	**What's Hot: CogSci** What's Hot in Cognitive Science *Matthias Scheutz*	
	LUNCH, 11:50 AM– 1:00 PM			

	HALL 200A	301A	301B	302A
1:00 – 2:00 PM	**AAAI-14 Invited Talk** Behavioral Network Science *Michael Kearns (University of Pennsylvania)* *Introduction by Peter Stone*			
2:00 – 2:30 PM	**Plenary Technical Session 1 (Hall 200A)** Can Agent Development Affect Developer's Strategy? *Avshalom Elmalech, David Sarne, Noa Agmon* Active Learning with Model Selection *Alnur Ali, Rich Caruana, Ashish Kapoor* Sketch Recognition with Natural Correction and Editing *Jie Wu, Changhu Wang, Liqing Zhang, Yong Rui* Designing Fast Absorbing Markov Chains *Stefano Ermon, Carla P. Gomes, Ashish Sabharwal, Bart Selman* On Hair Recognition in the Wild by Machine *Joseph Roth, Xiaoming Liu* How Do Your Friends on Social Media Disclose Your Emotions? *Yang Yang, Jia Jia, Shumei Zhang, Boya Wu, Qicong Chen, Juanzi Li, Chunxiao Xing, Jie Tang*		Automatic Construction and Natural-Language Description of Nonparametric Regression Models *James Robert Lloyd, David Duvenaud, Roger Grosse, Joshua B. Tenenbaum, Zoubin Ghahramani* Confident Reasoning on Raven's Progressive Matrices Tests *Keith McGreggor, Ashok Goel* Learning Deep Representations for Graph Clustering *Fei Tian, Bin Gao, Qing Cui, Enhong Chen, Tie-Yan Liu* Capturing Difficulty Expressions in Student Online Q&A Discussions *Jaebong Yoo, Jihie Kim* Quality-Based Learning for Web Data Classification *Ou Wu, Ruiguang Hu, Xue Mao, Weiming Hu* A Region-Based Model for Estimating Urban Air Pollution *Arnaud Jutzeler, Jason Jingshi Li, Boi Faltings*	
2:35– 3:35 PM		**Robotics** Robust Visual Robot Localization across Seasons Using Network Flows *Tayyab Naseer, Luciano Spinello, Wolfram Burgard, Cyrill Stachniss* A Framework for Task Planning in Heterogeneous Multi Robot Systems Based on Robot Capabilities *Jennifer Buehler, Maurice Pagnucco* Schedule-Based Robotic Search for Multiple Residents in a Retirement Home Environment *Markus Schwenk, Tiago Vaquero, Goldie Nejat* GP-Localize: Persistent Mobile Robot Localization Using Online Sparse Gaussian Process Observation Model *Nuo Xu, Kian Hsiang Low, Jie Chen, Keng Kiat Lim, Etkin Baris Özgül*	**Knowledge Representation and Reasoning** A Tractable Approach to ABox Abduction over Description Logic Ontologies *Jianfeng Du, Kewen Wang, Yi-Dong Shen* Reasoning on LTL on Finite Traces: Insensitivity to Infiniteness *Giuseppe De Giacomo, Riccardo De Masellis, Marco Montali* Datalog Rewritability of Disjunctive Datalog Programs and its Applications to Ontology Reasoning *Mark Kaminski, Yavor Nenov, Bernardo Cuenca Grau* Capturing Relational Schemas and Functional Dependencies in RDFS *Diego Calvanese, Wolfgang Fischl, Reinhard Pichler, Emanuel Sallinger, Mantas Simkus*	**Vision** Semantic Graph Construction for Weakly-Supervised Image Parsing *Wenxuan Xie, Yuxin Peng, Jianguo Xiao* Efficient Object Detection via Adaptive Online Selection of Sensor-Array Elements *Matthai Philipose* Grounding Acoustic Echoes in Single View Geometry Estimation *Wajahat Hussain, Javier Civera, Luis Montano* Sub-Selective Quantization for Large-Scale Image Search *Yeqing Li, Chen Chen, Wei Liu, Junzhou Huang*
	COFFEE BREAK, 3:35 – 4:00 PM Hall 200C			
4:00 – 5:00 PM	**AAAI-14 Invited Talk** *Cynthia Breazeal (Massachusetts Institute of Technology)* *Introduction by Carla Brodley*			
5:00 – 5:30 PM	**Plenary Technical Session 2 (Hall 200A)** Solving Imperfect Information Games Using Decomposition *Neil Burch, Michael Johanson, Michael Bowling* Exploiting Competition Relationship for Robust Visual Recognition *Liang Du, Haibin Ling* Source Free Transfer Learning for Text Classification *Zhongqi Lu, Yin Zhu, Sinno Jialin Pan, Evan Wei Xiang, Yujing Wang, Qiang Yang* Locality Preserving Hashing *Kang Zhao, Hongtao Lu, Jincheng Mei* R2: An Efficient MCMC Sampler for Probabilistic Programs *Aditya V. Nori, Chung-Kil Hur, Sriram K. Rajamani, Selva Samuel* Modeling and Predicting Popularity Dynamics via Reinforced Poisson Process *Huawei Shen, Dashun Wang, Chaoming Song, Albert-László Barabási*		Tailoring Local Search for Partial MaxSAT *Shaowei Cai, Chuan Luo, John Thornton, Kaile Su* Multi-Instance Learning with Distribution Change *Wei-Jia Zhang, Zhi-Hua Zhou* A Strategy-Proof Online Auction with Time Discounting Values *Fan Wu, Junming Liu, Zhenzhe Zheng, Guihai Chen* Non-Linear Label Ranking for Large-Scale Prediction of Long-Term User Interests *Nemanja Djuric, Mihajlo Grbovic, Vladan Radosavljevic, Narayan Bhamidipati, Slobodan Vucetic* Improving Semi-Supervised Target Alignment via Label-Aware Base Kernels *Qiaojun Wang, Kai Zhang, Guofei Jiang, Ivan Marsic* Combining Multiple Correlated Reward and Shaping Signals by Measuring Confidence *Tim Brys, Ann Nowé, Daniel Kudenko, Matthew E. Taylor*	
5:30 – 10:30 PM	**POSTER SESSION I, 5:30 – 7:00 PM** Hall 200C *(Please see insert)* **CONFERENCE FÊTE, 7:30 – 10:30 PM** Le Théâtre Capitole and Le Cabaret du Capitole de Québec, 972 Rue Saint-Jean *(5 minute walk)*			

	302B	303A	303B	304A/B
1:00 – 2:00 PM				
2:00 – 2:30 PM				**IAAI: Resource Scheduling** *Session Chair: Jana Koehler* *Deployed:* Engineering Works Scheduling for Hong Kong's Rail Network *Andy Hon Wai Chun, Ted Yiu Tat Suen* *Emerging:* A Schedule Optimization Tool for Destructive and Non-Destructive Vehicle Tests *Jeremy Ludwig, Annaka Kalton, Robert Richards, Brian Bautsch, Craig Markusic, J. Schumacher* *Emerging:* STREETS: Game-Theoretic Traffic Patrolling with Exploration and Exploitation *Matthew Brown, Sandhya Saisubramanian, Pradeep Varakantham, Milind Tambe*
2:35 – 3:35 PM	**Cognitive Systems** Learning Compositional Sparse Models of Bimodal Percepts *Suren Kumar, Vikas Dhiman, Jason J. Corso* Learning Goal-Oriented Hierarchical Tasks from Situated Interactive Instruction *Shiwali Mohan, John E. Laird* Social Planning: Achieving Goals by Altering Others' Mental States *Chris Pearce, Ben Meadows, Pat Langley, Mike Barley* Using Narrative Function to Extract Qualitative Information from Natural Language Texts *Clifton McFate, Kenneth Forbus, Thomas Hinrichs*	**Machine Learning Applications** Identifying Differences in Physician Communication Styles with a Log-Linear Transition Component Model *Byron C. Wallace, Issa J. Dahabreh, Thomas A. Trikalinos, M. Barton Laws, Ira Wilson, Eugene Charniak* Accurate Household Occupant Behavior Modeling Based on Data Mining Techniques *Márcia Baptista, Anjie Fang, Helmut Prendinger, Rui Prada, Yohei Yamaguchi* Learning Latent Engagement Patterns of Students in Online Courses *Arti Ramesh, Dan Goldwasser, Bert Huang, Hal Daumé III, Lise Getoor* Decomposing Activities of Daily Living to Discover Routine Clusters *Onur Yürüten, Jiyong Zhang, Pearl Pu*	**Game Theory and Economic Paradigms / Multiagent Systems** Increasing VCG Revenue by Decreasing the Quality of Items *Mingyu Guo, Argyrios Deligkas, Rahul Savani* Incentives for Truthful Information Elicitation of Continuous Signals *Goran Radanovic, Boi Faltings* Equilibria in Epidemic Containment Games *Sudip Saha, Abhijin Adiga, Anil Kumar S. Vullikanti*	*Emerging:* AI-MIX: Using Automated Planning to Steer Human Workers towards Better Crowdsourced Plans *Lydia Manikonda, Tathagata Chakraborti, Sushovan De, Kartik Talamadupula, Subbarao Kambhampati*

COFFEE BREAK, 3:35 – 4:00 PM
Hall 200C

	302B	303A	303B	304A/B
4:00 – 5:00 PM				
5:00 – 5:30 PM				

POSTER SESSION I, 5:30 – 7:00 PM
Hall 200C *(Please see insert)*

CONFERENCE FÊTE, 7:30 – 10:30 PM
Le Théâtre Capitole and Le Cabaret du Capitole de Québec, 972 Rue Saint-Jean *(5 minute walk)*

	HALL 200A	301A	301B	302A
8:30 – 9:15 AM		**What's Hot: RL/ ECMLPKDD / RSS** Senior Member: What's Hot in Reinforcement Learning *Volodymyr Mnih* What's Hot in Machine Learning *Animashree Anandkumar* Challenges in Robotics *Stefanie Tellex*	**Senior Member** Program Induction in the Real World *Stephen Muggleton* Implications of Algorithmic and High-Frequency Trading *Michael Wellman* Spectral Learning Methods for Natural Language Processing *Lyle Ungar*	
9:15 – 10:00 AM		**Novel Machine Learning Algorithms** Kernelized Bayesian Transfer Learning *Mehmet Gönen, Adam A. Margolin* Dropout Training for Support Vector Machines *Ning Chen, Jun Zhu, Jianfei Chen, Bo Zhang* ReLISH: Reliable Label Inference via Smoothness Hypothesis *Chen Gong, Dacheng Tao, Keren Fu, Jie Yang*	**Knowledge Representation and Reasoning / Applications** Using Model-Based Diagnosis to Improve Software Testing *Tom Zamir, Roni Stern, Meir Kalech* Pay-As-You-Go OWL Query Answering Using a Triple Store *Yujiao Zhou, Yavor Nenov, Bernardo Cuenca Grau, Ian Horrocks* The Most Uncreative Examinee: A First Step toward Wide Coverage Natural Language Math Problem Solving *Takuya Matsuzaki, Hidenao Iwane, Hirokazu Anai, Noriko Arai*	**Heuristic Search and Optimization** Exponential Deepening A* for Real-Time Agent-Centered Search *Guni Sharon, Ariel Felner, Nathan R. Sturtevant* Identifying Hierarchies for Fast Optimal Search *Tansel Uras, Sven Koenig* Elimination Ordering in Lifted First-Order Probabilistic Inference *Seyed Mehran Kazemi, David Poole*

COFFEE BREAK, 10:00 – 10:20 AM

	HALL 200A	301A	301B	302A
10:20 – 11:50 AM		**Novel Machine Learning Algorithms** Encoding Tree Sparsity in Multi-Task Learning: A Probabilistic Framework *Lei Han, Yu Zhang, Guojie Song, Kunqing Xie* Labeling Complicated Objects: Multi-View Multi-Instance Multi-Label Learning *Cam-Tu Nguyen, Xiaoliang Wang, Zhi-Hua Zhou* Cross-Domain Metric Learning Based on Information Theory *Hao Wang, Wei Wang, Chen Zhang, Fanjiang Xu* HC-Search for Multi-Label Prediction: An Empirical Study *Janardhan Rao Doppa, Jun Yu, Chao Ma, Alan Fern, Prasad Tadepalli* Learning Instance Concepts from Multiple-Instance Data with Bags as Distributions *Gary Doran, Soumya Ray* Online Multi-Task Learning via Sparse Dictionary Optimization *Paul Ruvolo, Eric Eaton*	**NLP and Knowledge Representation / NLP and Vision** SenticNet 3: A Common and Common-Sense Knowledge Base for Cognition-Driven Sentiment Analysis *Erik Cambria, Daniel Olsher, Dheeraj Rajagopal* Improving Domain-Independent Cloud-Based Speech Recognition with Domain-Dependent Phonetic Post-Processing *Johannes Twiefel, Timo Baumann, Stefan Heinrich, Stefan Wermter* Knowledge Graph Embedding by Translating on Hyperplanes *Zhen Wang, Jianwen Zhang, Jianlin Feng, Zheng Chen* Mind the Gap: Machine Translation by Minimizing the Semantic Gap in Embedding Space *Jiajun Zhang, Shujie Liu, Mu Li, Ming Zhou, Chengqing Zong* Hybrid Singular Value Thresholding for Tensor Completion *Xiaoqin Zhang, Zhengyuan Zhou, Di Wang, Yi Ma* PREGO: An Action Language for Belief-Based Cognitive Robotics in Continuous Domains *Vaishak Belle, Hector J. Levesque*	**Vision** Learning Low-Rank Representations with Classwise Block-Diagonal Structure for Robust Face Recognition *Yong Li, Jing Liu, Zechao Li, Yangmuzi Zhang, Hanqing Lu, Songde Ma* Semantic Segmentation Using Multiple Graphs with Block-Diagonal Constraints *Ke Zhang, Wei Zhang, Sheng Zeng, Xiangyang Xue* Locality-Constrained Low-Rank Coding for Image Classification *Ziheng Jiang, Ping Guo, Lihong Peng* Diagram Understanding in Geometry Problems *Min Joon Seo, Hannaneh Hajishirzi, Ali Farhadi, Oren Etzioni* Latent Domains Modeling for Visual Domain Adaptation *Caiming Xiong, Scott McCloskey, Shao-Hang Hsieh, Jason J. Corso* Low-Rank Tensor Learning with Discriminant Analysis for Action Classification and Image Recovery *Chengcheng Jia, Guoqiang Zhong, Yun Fu*

LUNCH BREAK, 11:50 AM– 1:00 PM

	302B	303A	303B	304A/B

8:30 – 9:15 AM

303A — What's Hot: ICWSM/SoCS/CogSci

What's Hot in Social Media
Eytan Adar

Challenges in Combinatorial Search
Nathan Sturtevant

Challenges in Cognitive Science
Vincent C. Mueller

303B — Senior Member

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

Knowledge Compilation
Adnan Darwiche

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

304A/B — IAAI-14 Invited Talk

The Conversational User Interface
Ron Kaplan (Nuance Communications, Inc.) — Introduction by David Stracuzzi

9:00 – 10:00 AM

9:15 – 10:00 AM

303A — Cognitive Modeling

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

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

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

303B — Game Theory and Economic Paradigms/ Game Playing

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

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

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

COFFEE BREAK, 10:00 – 10:20 AM

10:20 – 11:50 AM

302B — Planning and Scheduling

Decentralized Stochastic Planning with Anonymity in Interactions
Pradeep Varakantham, Yossiri Adulyasak, Patrick Jaillet

Type-Based Exploration with Multiple Search Queues for Satisficing Planning
Fan Xie, Martin Müller, Robert Holte, Tatsuya Imai

Symbolic Domain Predictive Control
Johannes Löhr, Martin Wehrle, Maria Fox, Bernhard Nebel

Grandpa Hates Robots — Interaction Constraints for Planning in Inhabited Environments
Uwe Köckemann, Federico Pecora, Lars Karlsson

Cost-Based Query Optimization via AI Planning
Nathan Robinson, Sheila A. McIlraith, David Toman

Computing Contingent Plans via Fully Observable Non-Deterministic Planning
Christian Muise, Vaishak Belle, Sheila A. McIlraith

303A — AI and the Web

Fraudulent Support Telephone Number Identification Based on Co-occurrence Information on the Web
Xin Li, Yiqun Liu, Min Zhang, Shaoping Ma

Influence Maximization with Novelty Decay in Social Networks
Shanshan Feng, Xuefeng Chen, Gao Cong, Yifeng Zeng, Yeow Meng Chee, Yanping Xiang

Online Social Spammer Detection
Xia Hu, Jiliang Tang, Huan Liu

Stochastic Privacy
Adish Singla, Eric Horvitz, Ece Kamar, Ryen White

k-CoRating: Filling up Data to Obtain Privacy and Utility
Feng Zhang, Victor E Lee, Ruoming Jin

Fast and Accurate Influence Maximization on Large Networks with Pruned Monte-Carlo Simulations
Naoto Ohsaka, Takuya Akiba, Yuichi Yoshida, Ken-ichi Kawarabayashi

303B — Game Theory and Economic Paradigms

Game-Theoretic Resource Allocation for Protecting Large Public Events
Yue Yin, Bo An, Manish Jain

Fixing a Balanced Knockout Tournament
Haris Aziz, Serge Gaspers, Simon Mackenzie, Nicholas Mattei, Paul Stursberg, Toby Walsh

Lazy Defenders Are Almost Optimal against Diligent Attackers
Avrim Blum, Nika Haghtalab, Ariel D. Procaccia

Preference Elicitation and Interview Minimization in Stable Matchings
Joanna Drummond, Craig Boutilier

Regret Transfer and Parameter Optimization
Noam Brown, Tuomas Sandholm

On Detecting Nearly Structured Preference Profiles
Edith Elkind, Martin Lackner

304A/B — IAAI: Deployed Applications

Session Chair: Ted Senator

Deployed: Deploying Community Commands: A Software Command Recommender System Case Study
Wei Li, Justin Matejka, Tovi Grossman, George Fitzmaurice

Deployed: Predictive Models for Determining If and When to Display Online Lead Forms
Timothy Chan, Joseph I, Carlos Macasaet, Daniel Kang, Robert M. Hardy, Carlos Ruiz, Rigel Porras, Brian Baron, Karim Qazi, Padraic Hannon, Tomonori Honda

Deployed: CiteSeerX: AI in a Digital Library Search Engine
Jian Wu, Kyle Williams, Hung-Hsuan Chen, Madian Khabsa, Cornelia Caragea, Alexander Ororbia, Douglas Jordan, C. Lee Giles

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LUNCH BREAK, 11:50 AM – 1:00 PM

	HALL 200A	301A	301B	302A
1:00 – 2:00 PM	**AAAI-14 Presidential Address** Fascinating Research and Engaged Community *Manuela M. Veloso (Carnegie Mellon University) — Introduction by Henry Kautz*			

2:00 – 2:40 PM

Plenary Technical Session 3

Feature-Cost Sensitive Learning with Submodular Trees of Classifiers
Matt J. Kusner, Wenlin Chen, Quan Zhou, Zhixiang (Eddie) Xu, Kilian Q. Weinberger, Yixin Chen

A Computational Challenge Problem in Materials Discovery: Synthetic Problem Generator and Real-World Datasets
Ronan Le Bras, Richard Bernstein, John M. Gregoire, Santosh K. Suram, Carla P. Gomes, Bart Selman, R. Bruce van Dover

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

On Boosting Sparse Parities
Lev Reyzin

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

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

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

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

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

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

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

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

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

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

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

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

2:45– 3:30 PM

	Machine Learning Applications	**Heuristic Search and Optimization / RL**	**Novel Machine Learning Algorithms**
	Accurate Integration of Aerosol Predictions by Smoothing on a Manifold *Shuai Zheng, James T. Kwok*	Generalizing Policy Advice with Gaussian Process Bandits for Dynamic Skill Improvement *Jared Glover, Charlotte Zhu*	Predicting the Hardness of Learning Bayesian Networks *Brandon Malone, Kustaa Kangas, Matti Järvisalo, Mikko Koivisto, Petri Myllymäki*
	Robust Distance Metric Learning in the Presence of Label Noise *Dong Wang, Xiaoyang Tan*	Robust Bayesian Inverse Reinforcement Learning with Sparse Behavior Noise *Jiangchuan Zheng, Siyuan Liu, Lionel Ni*	Relational One-Class Classification: A Non-Parametric Approach *Tushar Khot, Sriraam Natarajan, Jude Shavlik*
	Predicting Postoperative Atrial Fibrillation from Independent ECG Components *Chih-Chun Chia, James Blum, Zahi Karam, Satinder Singh, Zeeshan Syed*	Multiagent Metareasoning through Organizational Design *Jason Sleight, Edmund H. Durfee*	User Group Oriented Temporal Dynamics Exploration *Zhiting Hu, Junjie Yao, Bin Cui*

3:30 – 5:00 PM

POSTER SESSION, COFFEE BREAK, 3:30 – 5:00 PM
Hall 200C

5:00 – 6:00 PM

SPEED DATING, 5:00 – 6:00 PM
Hall 206A/B
(First 240 people admitted; doors close at 5:10 PM)

6:00 – 10:30 PM

WEDNESDAY EVENING BUFFET, PASTA STATION: 6:00 – 7:15 PM
Hall 200C

FUN AND GAMES NIGHT, 7:30 – 10:30 PM
Hall 206A/B

	302B	303A	303B	304A/B
1:00 – 2:00 PM				
2:00 – 2:40 PM				**IAAI: Interfaces and Patterns** *Session Chair: Reid Smith* *Emerging:* A Smart Range Helping Cognitively-Impaired Persons Cooking *Bruno Bouchard, Kevin Bouchard, Abdenour Bouzouane* *Emerging:* A Speech-Driven Second Screen Application for TV Program Discovery *Peter Z. Yeh, Ben Douglas, William Jarrold, Adwait Ratnaparkhi, Deepak Ramachandran, Peter F. Patel-Schneider, Stephen Laverty, Nirvana Tikku, Sean Brown, Jeremy Mendel* *Emerging:* Clustering Species Accumulation Curves to Identify Skill Levels of Citizen Scientists Participating in the eBird Project *Jun Yu, Weng-Keen Wong, Steve Kelling* *Emerging:* Pattern Discovery in Protein Networks Reveals High-Confidence Predictions of Novel Interactions *Hazem Radwan Ahmed, Janice I. Glasgow*
2:45 – 3:30 PM	**Multiagent Systems** Give a Hard Problem to a Diverse Team: Exploring Large Action Spaces *Leandro Soriano Marcolino, Haifeng Xu, Albert Xin Jiang, Milind Tambe, Emma Bowring* Dynamic Multi-Agent Task Allocation with Spatial and Temporal Constraints *Sofia Amador, Steven Okamoto, Roie Zivan* Symbolic Model Checking Epistemic Strategy Logic *Xiaowei Huang, Ron van der Meyden*	**AI and the Web / Vision** Cross-View Feature Learning for Scalable Social Image Analysis *Wenxuan Xie, Yuxin Peng, Jianguo Xiao* Unsupervised Alignment of Natural Language Instructions with Video Segments *Iftekhar Naim, Young Chol Song, Qiguang Liu, Henry Kautz, Jiebo Luo, Daniel Gildea* Experiments on Visual Information Extraction with the Faces of Wikipedia *Md. Kamrul Hasan, Christopher Pal*	**Game Theory and Economic Paradigms** Mechanism Design for Scheduling with Uncertain Execution Time. *Vincent Conitzer, Angelina Vidali* Beat the Cheater: Computing Game-Theoretic Strategies for When to Kick a Gambler Out of a Casino *Troels Bjerre Sørensen, Melissa Dalis, Joshua Letchford, Dmytro Korzhyk, Vincent Conitzer* A Characterization of the Single-Peaked Single-Crossing Domain *Edith Elkind, Piotr Faliszewski, Piotr Skowron*	
3:30 – 5:00 PM	POSTER SESSION, COFFEE BREAK, 3:30 – 5:00 PM Hall 200C			**IAAI: Discussion Panel** From Research to Deployed Applications: Crossing the Valley of Death *Panelists: Craig Knoblock, Adam Cheyer, David Gunning* 4:00 – 5:00 PM
5:00 – 6:00 PM	SPEED DATING, 5:00 – 6:00 PM Hall 206A/B *(First 240 people admitted; doors close at 5:10 PM)*			
6:00 – 10:30 PM	WEDNESDAY EVENING BUFFET, PASTA STATION: 6:00 – 7:15 PM Hall 200C FUN AND GAMES NIGHT, 7:30 – 10:30 PM Hall 206A/B			

	HALL 200A	301A	301B	302A
8:40 – 9:25 AM		**What's Hot: ICML/RSS/ICLR** Challenges in Machine Learning *Thorsten Joachims* What's Hot in Robotics *Ashutosh Saxena* What's Hot in Learning Representations *Aaron Courville*	**Senior Member** Automating Science: A Grand Challenge for AI *Vasant Honavar* Themes and Progress in Computational Scientific Discovery *Pat Langley* Task Learning: a Challenge Problem for Integrated Intelligent Agents *John Laird, Kenneth Forbus*	
9:25 – 9:55 AM		**Novel Machine Learning Algorithms** Exact Subspace Clustering in Linear Time *Shusen Wang, Bojun Tu, Congfu Xu, Zhihua Zhang* Learning with Augmented Class by Exploiting Unlabeled Data *Qing Da, Yang Yu, Zhi-Hua Zhou*	**Novel Machine Learning Algorithms** Power Iterated Color Refinement *Kristian Kersting, Martin Mladenov, Roman Garnet, Martin Grohe* Convex Co-Embedding *Farzaneh Mirzazadeh, Yuhong Guo, Dale Schuurmans*	**Game Design/Intelligent Tutoring** Synthesis of Geometry Proof Problems *Chris Alvin, Sumit Gulwani, Rupak Majumdar, Supratik Mukhopadhyay* Automatic Game Design via Mechanic Generation *Alexander Zook, Mark O. Riedl*
	COFFEE BREAK, 9:55 – 10:15 AM			
10:15 – 11:15 AM	**AAAI-14 Invited Talk** Game Theory for Security: Key Algorithmic Principles, Deployed Applications, Research Challenges *Milind Tambe (University of Southern California) — Introduction by Peter Stone*			
11:20 AM – 12:20 PM		**Novel Machine Learning Algorithms** A Spatially Sensitive Kernel to Predict Cognitive Performance from Short-Term Changes in Neural Structure *M. Hidayath Ansari, Michael H. Coen, Barbara B. Bendlin, Mark A. Sager, Sterling C. Johnson* Online Classification Using a Voted RDA Method *Tianbing Xu, Jianfeng Gao, Lin Xiao, Amelia C. Regan* Bagging by Design (on the Suboptimality of Bagging) *Periklis A. Papakonstantinou, Jia Xu, Zhu Cao* LASS: A Simple Assignment Model with Laplacian Smoothing *Miguel Á. Carreira-Perpiñán, Weiran Wang*	**NLP and Machine Learning** Adaptive Multi-Compositionality for Recursive Neural Models with Applications to Sentiment Analysis *Li Dong, Furu Wei, Ming Zhou, Ke Xu* On Dataless Hierarchical Text Classification *Yangqiu Song, Dan Roth* Instance-Based Domain Adaptation in NLP via In-Target-Domain Logistic Approximation *Rui Xia, Jianfei Yu, Feng Xu, Shumei Wang* Semi-Supervised Matrix Completion for Cross-Lingual Text Classification *Min Xiao, Yuhong Guo*	**Search and Constraint Satisfaction** Maximum Satisfiability Using Core-Guided MAXSAT Resolution *Nina Narodytska, Fahiem Bacchus* Adaptive Singleton-Based Consistencies *Amine Balafrej, Christian Bessiere, El Houssine Bouyakhf, Gilles Trombettoni* A Reasoner for the RCC-5 and RCC-8 Calculi Extended with Constants *Stella Giannakopoulou, Charalampos Nikolaou, Manolis Koubarakis* Fast Consistency Checking of Very Large Real-World RCC-8 Constraint Networks Using Graph Partitioning *Charalampos Nikolaou, Manolis Koubarakis*
	LUNCH BREAK, 12:20– 1:30 PM			

	302B	303A	303B	304A/B
8:40 – 9:25 AM		**Senior Member / IJCAI-JAIR 2014 Best Paper** *Senior Member:* Tackling Real World Data Streams: a Call to Arms *Bernhard Pfahringer* *Senior Member:* Computational Social Choice *Francesca Rossi* *IJCAI-JAIR 2014 Best Paper:* Wikipedia-Based Semantic Interpretation for Natural Language Processing *Evgeniy Gabrilovich and Shaul Markovitch (2009)*	**What's Hot: AIIDE/CP/QA** Challenges in Interactive Entertainment *Kevin Dill* Challenges in Constraint Programming *Pascal Van Hentenryck* Challenges Beyond Factoid Question Answering *Ken Barker*	**IAAI: Crowdsourcing** *Session Chair: Karen Haigh* Emerging: Robust Protection of Fisheries with COmPASS *William B. Haskell, Debarun Kar, Fei Fang, Milind Tambe, Sam Cheung, Lt. Elizabeth Denicola* *Emerging:* Swissnoise: Online Polls with Game-Theoretic Incentives *Florent Garcin, Boi Faltings* *Emerging:* Crowdsourcing for Multiple-Choice Question Answering *Bahadir Ismail Aydin, Yavuz Selim Yilmaz, Yaliang Li, Qi Li, Jing Gao, Murat Demirbas* 9:00 – 10:00 AM
9:25 – 9:55 AM	**Heuristic Search and Optimization / Planning and Scheduling** Optimal Decomposition in Linear Constraint Systems *Cees Witteveen, Michel Wilson, Tomas Klos* Cached Iterative Weakening for Optimal Multi-Way Number Partitioning *Ethan L. Schreiber, Richard E. Korf*	**Machine Learning / Vision** Supervised Hashing for Image Retrieval via Image Representation Learning *Rongkai Xia, Yan Pan, Hanjiang Lai, Cong Liu, Shuicheng Yan* Predicting Emotions in User-Generated Videos *Yu-Gang Jiang, Baohan Xu, Xiangyang Xue*	**Heuristic Search and Optimization** Programming by Example Using Least General Generalizations *Mohammad Raza, Sumit Gulwani, Natasa Milic-Frayling* Distribution-Aware Sampling and Weighted Model Counting for SAT *Supratik Chakraborty, Daniel J. Fremont, Kuldeep S. Meel, Sanjit A. Seshia, Moshe Y. Vardi*	

COFFEE BREAK, 9:55 – 10:15 AM

	302B	303A	303B	304A/B
10:15 – 11:15 AM				**IAAI: Transportation and Personalization** *Session Chair: Nestor Rychtyckyj* *Emerging:* A Unified Framework for Augmented Reality and Knowledge-Based Systems in Maintaining Aircraft *Geun-Sik Jo, Kyeong-Jin Oh, Inay Ha, Kee-Sung Lee, Myung-Duk Hong, Ulrich Neumann, Suya You* *Emerging:* Optimizing a Start-Stop Controller Using Policy Search *Noel Hollingsworth, Jason Meyer, Ryan McGee, Jeffrey Doering, George Konidaris, Leslie Kaelbling* *Emerging:* Advice Provision for Energy Saving in Automobile Climate Control Systems *Amos Azaria, Sarit Kraus, Claudia V. Goldman, Omer Tsimhoni* *Emerging:* StrokeBank: Automating Personalized Chinese Handwriting Generation *Alfred Zong, Yuke Zhu* 10:15 – 11:45 AM
11:20 AM – 12:20 PM	**AI and the Web/NLP and Text Mining** Acquiring Comparative Commonsense Knowledge from the Web *Niket Tandon, Gerard de Melo, Gerhard Weikum* Emotion Classification in Microblog Texts Using Class Sequential Rules *Shiyang Wen, Xiaojun Wan* SUIT: A Supervised User-Item Based Topic Model for Sentiment Analysis *Fangtao Li, Sheng Wang, Shenghua Liu, Ming Zhang* Where and Why Users "Check In" *Yoon-Sik Cho, Greg Ver Steeg, Aram Galstyan*	**Computational Sustainability and AI** Spatial Scan for Disease Mapping on a Mobile Population *Liang Lan, Vuk Malbasa, Slobodan Vucetic* Rounded Dynamic Programming for Tree-Structured Stochastic Network Design *Xiaojian Wu, Daniel Sheldon, Shlomo Zilberstein* Efficient Buyer Groups for Prediction-of-Use Electricity Tariffs *Valentin Robu, Meritxell Vinyals, Alex Rogers, Nicholas R. Jennings* Effective Management of Electric Vehicle Storage Using Smart Charging *Konstantina Valogianni, Wolfgang Ketter, John Collins, Dmitry Zhdanov*	**Multiagent Systems / Game Theory and Economic Paradigms** Multi-Organ Exchange: The Whole Is Greater than the Sum of its Parts *John P. Dickerson, Tuomas Sandholm* The Computational Rise and Fall of Fairness *John P. Dickerson, Jonathan Goldman, Jeremy Karp, Ariel D. Procaccia, Tuomas Sandholm* Online (Budgeted) Social Choice *Joel Oren, Brendan Lucier* Scalable Complex Contract Negotiation with Structured Search and Agenda Management *Xiaoqin Shelley Zhang, Mark Klein, Ivan Marsa-Maestre*	

LUNCH BREAK, 12:20– 1:30 PM

	HALL 200A	301A	301B	302A
1:30 – 2:30 PM	**AAAI-14 Invited Talk** *Padhraic Smyth (University of California, Irvine) — Introduction by Carla Brodley*			
2:35– 3:35 PM		**Novel Machine Learning Algorithms** Reconsidering Mutual Information Based Feature Selection: A Statistical Significance View *Xuan Vinh Nguyen, Jeffrey Chan, James Bailey* Efficient Generalized Fused Lasso and Its Application to the Diagnosis of Alzheimer's Disease *Bo Xin, Yoshinobu Kawahara, Yizhou Wang, Wen Gao* The Role of Dimensionality Reduction in Classification *Weiran Wang, Miguel Á. Carreira-Perpiñán* Deep Modeling of Group Preferences for Group-Based Recommendation *Liang Hu, Jian Cao, Guandong Xu, Longbing Cao, Zhiping Gu, Wei Cao*	**Humans and AI** Dramatis: A Computational Model of Suspense *Brian O'Neill, Mark Riedl* Ordering Effects and Belief Adjustment in the Use of Comparison Shopping Agents *Chen Hajaj, Noam Hazon, David Sarne* A Strategy-Aware Technique for Learning Behaviors from Discrete Human Feedback *Robert Loftin, James MacGlashan, Bei Pang, Matthew E. Taylor, Michael L. Littman, Jeff Huang, David L. Roberts* Discovering Better AAAI Keywords via Clustering with Community-Sourced Constraints *Kelly Moran, Byron C. Wallace, Carla E. Brodley*	**Game Theory and Economic Paradigms** A Generalization of Probabilistic Serial to Randomized Social Choice *Haris Aziz, Paul Stursberg* Biased Games *Ioannis Caragiannis, David Kurokawa, Ariel D. Procaccia* Simultaneous Cake Cutting *Eric Balkanski, Simina Brânzei, David Kurokawa, Ariel D. Procaccia* Incomplete Preferences in Single-Peaked Electorates *Martin Lackner*
3:35– 5:30 PM	POSTER SESSION, COFFEE BREAK, 3:35 – 5:30 PM Hall 200C			
5:30– 6:30 PM	VIDEO COMPETITION, 5:30 –6:30 PM Main Hall, Foyer 4, Loggia			

	302B	303A	303B	304A/B
1:30 – 2:30 PM				
2:35 – 3:35 PM	**Planning and Scheduling** Solving Uncertain MDPs by Reusing State Information and Plans *Ping Hou, William Yeoh, Tran Cao Son* Structured Possibilistic Planning Using Decision Diagrams *Nicolas Drougard, Florent Teichteil-Königsbuch, Jean-Loup Farges, Didier Dubois* A Simple Polynomial-Time Randomized Distributed Algorithm for Connected Row Convex Constraints *T. K. Satish Kumar, Duc Thien Nguyen, William Yeoh, Sven Koenig* Chance-Constrained Probabilistic Simple Temporal Problems *Cheng Fang, Peng Yu, Brian C. Williams*	**Applications** A Hybrid Grammar-Based Approach for Learning and Recognizing Natural Hand Gestures *Amir Sadeghipour, Stefan Kopp* A Machine Learning Approach to Musically Meaningful Homogeneous Style Classification *William Herlands, Ricky Der, Yoel Greenberg, Simon Levin* Forecasting Potential Diabetes Complications *Yang Yang, Walter Luyten, Lu Liu, Marie-Francine Moens, Jie Tang, Juanzi Li*	**Robotics** Efficient Optimization for Autonomous Manipulation of Natural Objects *Abdeslam Boularias, J. Andrew Bagnell, Anthony Stentz* Qualitative Planning with Quantitative Constraints for Online Learning of Robotic Behaviours *Timothy Wiley, Claude Sammut, Ivan Bratko* Learning from Unscripted Deictic Gesture and Language for Human-Robot Interactions *Cynthia Matuszek, Liefeng Bo, Luke Zettlemoyer, Dieter Fox* Minimising Undesired Task Costs in Multi-Robot Task Allocation Problems with In-Schedule Dependencies *Bradford Heap, Maurice Pagnucco*	
3:35– 5:30 PM	POSTER SESSION, COFFEE BREAK, 3:35 – 5:30 PM Hall 200C			
5:30– 6:30 PM	VIDEO COMPETITION, 5:30 –6:30 PM Main Hall, Foyer 4, Loggia			

Tutorial Forum

AAAI-14 technical registrants may attend up to four consecutive tutorials. All tutorials will be held on the 3rd level.

Sunday, July 27
9:00 AM – 1:00 PM

SA1: Large-Scale NonLinear Classification: Algorithms and Evaluations
Zhuang J. Wang
302A/B

SA2: Representing and Reasoning with Qualitative Preferences: Tools and Applications
Ganesh Ram Santhanam, Samik Basu, and Vasant Honavar
Room 301A

SA3: SAT in AI: High Performance Search Methods with Applications
Jussi Rintanen
Room 301B

SA4: Scaling Machine Learning
Alex Smola and Amr Ahmed
Room 303A

Sunday, July 27
2:00 PM – 6:00 PM

SP1: A Concise Introduction to Planning Models and Methods
Hector Geffner and Blai Bonet
Room 302A/B

SP2: Education and AI/Machine Learning
Ken Koedinger and John Stamper
Room 301A

SP3: Game Theory for Security
Bo An, Manish Jain, and Albert Jiang
Room 301B

SP4: Programming by Optimization: A Practical Paradigm for Computer-Aided Algorithm Design
Holger H. Hoos and Frank Hutter
Room 303A

Monday, July 28
9:00 AM – 1:00 PM

MA1: From Deep Blue to Monte Carlo: An Update on Game Tree Research (full day)
Akihiro Kishimoto and Martin Mueller
Room 302A/B

MA2: Latent Tree Models
Nevin L. Zhang
Room 301A

MA3: Lifted Approximate Inference: Methods and Theory
Hung Bui, Fabian Hadiji, Kristian Kersting, Martin Mladenov, and Sriraam Natarajan
Room 301B

MA4: Planning in Hybrid Domains
Maria Fox, Daniele Magazzeni
Room 303A

Monday, July 28
2:00 PM – 6:00 PM

MP1: Bayesian Mechanism Design
Jason Hartline
Room 302A/B

MP2: Sentiment Mining from User Generated Content
Ronen Feldman and Lyle Ungar
Room 301A

MP3: Tensor Decompostions for Learning Latent Variable Models
Anima Anandkumar, Daniel Hsu, and Sham Kakade
Room 301B

Workshop Program

Registration for a workshop requires a supplemental fee for AAAI-14 technical registrants.
Individuals who do not wish to participate in any other AAAI-14 programs or events may elect the workshop only registration fee..

Sunday, July 27

W1: AI and Robotics
Room 207
9:00 AM – 5:30 PM

W2: Artificial Intelligence Applied to Assistive Technologies and Smart Environments
Room 205B
9:15 AM – 4:30 PM

W3: Cognitive Computing for Augmented Human Intelligence
Room 205C
8:30 AM – 5:30 PM

W4: Computer Poker and Imperfect Information
Room 205A
9:50 AM – 5:30 PM

W5: Discovery Informatics
Room 304A
8:30 AM – 6:00 PM

W6: Incentives and Trust in Electronic Communities
Room 304B
9:30 AM – 5:30 PM

W10: Modern Artificial Intelligence for Health Analytics
Room 204A
9:00 AM – 6:00 PM

W15: Statistical Relational AI
Room 206A
9:00 AM – 5:00 PM

Monday, July 28

W7: Intelligent Cinematography and Editing
Room 304A
9:00 AM – 6:00 PM

W9: Machine Learning for Interactive Systems: Bridging the Gap between Perception, Action and Communication
Room 206A
8:50 AM – 5:30 PM

W11: Multiagent Interaction without Prior Coordination
Room 205B
9:00 AM – 5:00 PM

W12: Multidisciplinary Workshop on Advances in Preference Handling
Room 205C
8:30 AM – 5:10 PM

W13: Semantic Cities — Beyond Open Data to Models, Standards and Reasoning
Room 205A
8:30 AM – 5:30 PM

W14: Sequential Decision Making with Big Data
Room 207
9:00 AM – 6:00 PM

W16: The World Wide Web and Public Health Intelligence
Room 304B
9:00 AM – 6:00 PM

Poster Sessions

Poster sessions will be held in Hall 200C at the following times.

Tuesday, July 29, 5:30 – 7:00 PM

Wednesday, July 30, 3:30 – 5:00 PM

Thursday, July 31, 3:35 – 5:30 PM

Due to the size and complexity of the 2014 AAAI poster session, attendees should refer to the separate insert in their registration materials. Please note that posters for ALL AAAI technical papers will be available for viewing throughout the conference, Tuesday – Thursday, July 29-31.

Listed here are the posters that will also be available at the Tuesday evening poster session, including those for EAAI-14, Student Abstract, Doctoral Consortium, and the Poker Competition.

EAAI-14 Posters

Jim: A Platform for Affective AI in an Interdisciplinary Setting
Robert Selkowitz, Michael Heilemann, Jon Mrowczynski

Easychair as a Pedagogical Tool Engaging Graduate Students in the Reviewing Process
Kartik Talamadupula, Subbarao Kambhampati

Doctoral Consortium

Making CP-Nets (More) Useful
Thomas E. Allen

Information Sharing for Care Coordination
Ofra Amir

The Effect of Similarity between Human and Machine Action Choices on Adaptive Automation Performance
Jason M. Bindewald

Solving Semantic Problems Using Contexts Extracted from Knowledge Graphs
Adrian Boteanu

Reinforcement Learning on Multiple Correlated Signals
Tim Brys, Ann Nowé

Analogy Tutor: A Tutoring System for Promoting Conceptual Learning via Comparison
Maria D. Chang

Imputation, Social Choice, and Partial Preferences
John A. Doucette

Robot Team Exploration with Communication Restrictions
Elizabeth A. Jensen

The Semantic Interpretation of Trust in Multiagent Interactions
Anup K. Kalia

Modeling Argumentation and Explanation in the Social Web
Taraneh Khazaei

Automatically Creating Multilingual Lexical Resources
Khang Nhut Lam

Probabilistic Planning with Reduced Models
Luis Pineda

Roles and Teams Hedonic Games
Matthew Spradling

Compilation Based Approaches to Probabilistic Planning—Thesis Summary
Ran Taig

Living and Searching in the World: Object-Based State Estimation for Mobile Robots
Lawson L. S. Wong

Optimizing and Learning Diffusion Behaviors in Complex Network
Xiaojian Wu

Student Abstracts

Social Capital in Network Organizations
Saad Alqithami, Henry Hexmoor

To Share or Not to Share? The Single Agent in a Team Decision Problem
Ofra Amir, Barbara J. Grosz, Roni Stern

Monte Carlo Simulation Adjusting
Nobuo Araki, Masakazu Muramatsu, Kunihito Hoki, Satoshi Takahashi

Advice Provision for Choice Selection Processes with Ranked Options
Amos Azaria, Ya'akov Gal, Claudia V. Goldman, Sarit Kraus

A Knowledge Representation that Models Memory in Narrative Comprehension
Rogelio E. Cardona-Rivera, R. Michael Young

Association Rule Hiding Based on Evolutionary Multi-Objective Optimization by Removing Items
Peng Cheng, Jeng-Shyang Pan

A Model for Aggregating Contributions of Synergistic Crowdsourcing Workflows
Yili Fang, Hailong Sun, Richong Zhang, Jinpeng Huai, Yongyi Mao

Online Search Algorithm Configuration
Tadhg Fitzgerald, Yuri Malitsky, Barry O'Sullivan, Kevin Tierney

Addressing Complexity in Multi-Issue Negotiation via Utility Hypergraphs
Rafik Hadfi, Takayuki Ito

Communication-Restricted Exploration for Small Teams
Elizabeth A. Jensen, Ken Sugawara

Genotypic versus Behavioural Diversity for Teams of Programs under the 4-v-3 Keepaway Soccer Task
Stephen Kelly, Malcolm I. Heywood

A Novel Single-DBN Generative Model for Optimizing POMDP Controllers by Probabilistic Inference
Igor Kiselev, Pascal Poupart

Partial Satisfaction Planning under Time Uncertainty with Control on When Objectives Can Be Aborted
Sylvain Labranche, Éric Beaudry

Semantic Clustering of Morphologically Related Chinese Words
Chia-Ling Lee, Ya-Ning Chang, Chao-Lin Liu, Chia-Ying Lee, Jane Yung-jen Hsu

Crowdsourced Explanations for Humorous Internet Memes
Chi-Chin Lin, Jane Yung-jen Hsu

LSDH: A Hashing Approach for Large-Scale Link Prediction in Microblogs
Dawei Liu, Yuanzhuo Wang, Yantao Jia, Jingyuan Li, Zhihua Yu

Identifying Domain-Dependent Influential Microblog Users: A Post-Feature Based Approach
Nian Liu, Lin Li, Guandong Xu, Zhenglu Yang

RepRev: Mitigating the Negative Effects of Misreported Ratings
Yuan Liu, Siyuan Liu, Hui Fang, Jie Zhang, Han Yu, Chunyan Miao

Reputation-Aware Continuous Double Auction
Yuan Liu, Jie Zhang, Han Yu, Chunyan Miao

Computing Preferences Based on Agents' Beliefs
Jian Luo, Fuan Pu, Yulai Zhang, Guiming Luo

Event Recommendation in Event-Based Social Networks
Zhi Qiao, Peng Zhang, Chuan Zhou, Yanan Cao, Li Guo, Yanchun Zhang

Coordination of Multiple Teams of Robots for an Optimal Global Plan
Zeynep G. Saribatur, Esra Erdem, Volkan Patoglu

Inference Graphs: A New Kind of Hybrid Reasoning System
Daniel R. Schlegel, Stuart C. Shapiro

Online Multi-Task Gradient Temporal-Difference Learning
Vishnu Purushothaman Sreenivasan, Haitham Bou Ammar, Eric Eaton

A Data Complexity Approach to Kernel Selection for Support Vector Machines
Roberto Valerio, Ricardo Vilalta

A Model Attention and Selection Framework for Estimation of Many Variables, with Applications to Estimating Object States in Large Spatial Environments
Lawson L. S. Wong

Converting Instance Checking to Subsumption: A Rethink for Object Queries over Practical Ontologies
Jia Xu, Ubbo Visser, Mansur Kabuka

Uncovering Hidden Structure through Parallel Problem Decomposition
Yexiang Xue, Stefano Ermon, Carla P. Gomes, Bart Selman

Representing Words as Lymphocytes
Jinfeng Yang, Yi Guan, Xishuang Dong, Bin He

Data Clustering by Laplacian Regularized l^1-Graph
Yingzhen Yang, Zhangyang Wang, Jianchao Yang, Jiangping Wang, Shiyu Chang, Thomas S. Huang

Fast Algorithm for Non-Stationary Gaussian Process Prediction
Yulai Zhang, Guiming Luo

Inferring Causal Directions in Errors-in-Variables Models
Yulai Zhang, Guiming Luo

Content-Structural Relation Inference in Knowledge Base
Zeya Zhao, Yantao Jia, Yuanzhuo Wang, Xueqi Cheng

AAAI-14 Poker Symposium Posters

Results of the 2014 Computer Poker Competition
Neil Burch and Kevin Waugh

Regret Transfer and Parameter Optimization
Noam Brown and Tuomas Sandholm

Hyperborean 2014
Michael Bowling, Duane Szafron, Rob Holte, Nolan Bard, Neil Burch, Richard Gibson, John Hawkin, Michael Johanson, Trevor Davis, Josh Davidson, and Dustin Morrill

Asymmetric Abstractions for Adversarial Settings
Nolan Bard, Michael Johanson, and Michael Bowling

Search in Imperfect Information Games using Online Monte Carlo Counterfactual Regret Minimization
Marc Lanctot, Viliam Lis and Michael Bowling

Exhibit Program

The exhibit program will be held Tuesday – Thursday, July 29–31, in the Level 2 Foyer. Exhibit hours will be:

Tuesday, July 29

10:00 AM – 5:30 PM

Wednesday, July 30

10:00 AM – 5:00 PM

Thursday, July 31

10:00 AM – 12:00 PM

Exhibitors

AAAI Press

2275 East Bayshore Road, Suite 160
Palo Alto, CA 94303
650-328-3123
publications14@aaai.org
aaai.org/Press/press.php

AI Topics

aaai.org/aitopics

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cambridge.org/us/

Stop by the Cambridge table to browse new titles such as *Knowledge Representation, Reasoning,* and the *Design of Intelligent Agents* by Gelfond and Kahl, *Mobile Robotics* by Kelly, *Brain-Computer Interfacing* by Rao, and the new edition of the text *Cognitive Science* by Bermudez.

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General Information

ADA Devices

The staff at the Québec Convention Center is committed to ensuring that they meet and exceed all of the requirements for the Americans & Canadians with Disabilities Act. The staff is trained to accommodate guests with special needs.

Admission

Each conference attendee will receive a name badge upon registration. This badge is required for admittance to the technical, tutorial, IAAI, EAAI, and workshop programs, as well as all social events. Smoking is not allowed in any of the technical, tutorial, workshop, IAAI, or EAAI sessions.

Banking

A Desjardins ATM is set near the main entrance to the Convention Center and two banks (Scotia Bank and Desjardins) are located within a 5 minute walking distance.

Business Center/Shipping

A business center will be open during the conference. Please see a Convention Center representative for location and hours.

Career Information

A bulletin board for job opportunities in the artificial intelligence industry will be made available in the registration area. Attendees are welcome to post job descriptions of openings at their company or institution.

Dining

A sandwich cart will be available in the Québec Convention Centre during the lunch break. In addition, there are many restaurants of varying cuisine and price points within a 5-minute walk of the Centre. The Hilton Québec has two restaurants, including the Allegro (7:00 AM – 10:00 PM daily), the LE23 (buffet, 12:00 - 2:00 PM, Monday - Friday). A dining guide will be available in the registration area.

Hotel Reservations

For information regarding hotel reservations, please contact the Hilton Québec Hotel directly at 418-647-2411.

List of Attendees

A list of preregistered attendees of the conference will be available for review at the AAAI Desk in the registration area. Attendee lists will not be distributed.

Parking

Self-parking at the Québec Hilton is $20 CAN (tax included) and Valet Parking is $30 CAN (tax included) per 24 hours. In and out privileges are included. There are three public parking lots near the Québec Convention Centre with prices ranging from $2.50 (up to 20 minutes) - $20.00 CAN (24-hour period). Daily Convention rates are available for $11.00 CAN per day. See convention.qc.ca/en/attending-event/parking for locations.

Internet Access

The Québec City Convention Centre offers free wireless Internet access for the duration of your stay. This free connection offers speeds of 10Mbps and a bandwidth limitation of 5 GB per day, per device. Once the 5 GB quota has been reached, you will be automatically redirected to their portal home page, and invited to pay for access to complete the day. You can choose from a $15.00 code for the duration of the day with the same speed and a bandwidth usage of 10GB or $125.00 for the duration of your event with a higher connection speed.

Connection Procedure to the Free Wireless Internet

1. Activate the wireless network card on the computer (or other device)
2. Connect to: Vidéotron_Centre_des_congres
3. Open a web browser and try to connect to a website. You will be redirected to our portal. Once on the home page, choose: Videotron Free Wireless Internet
4. Read and accept the terms and conditions

Printed Materials

Display tables for the distribution of promotional and informational materials of interest to conference attendees will be located in the registration area.

Proceedings/Technical Reports

AAAI proceedings are distributed in electronic format only. A downloadable PDF was made available to all pre-registered attendees, and the individual papers are available in the AAAI Digital Library (http://www.aaai.org/Library/AAAI/aaai14contents.php).
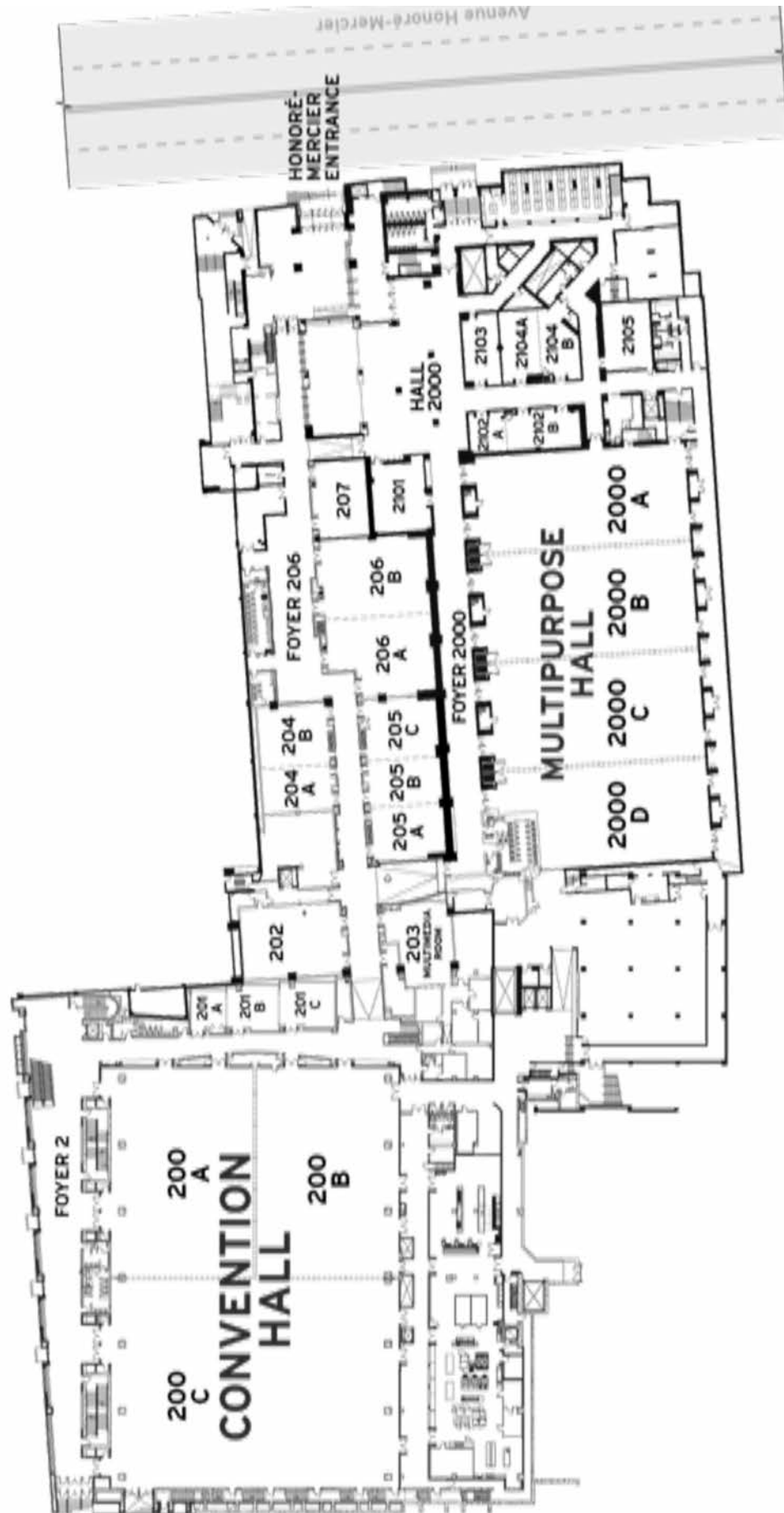
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The volunteer station will be located in the onsite registration area. All volunteers are required to sign in prior to their shift, and sign out when they finish.
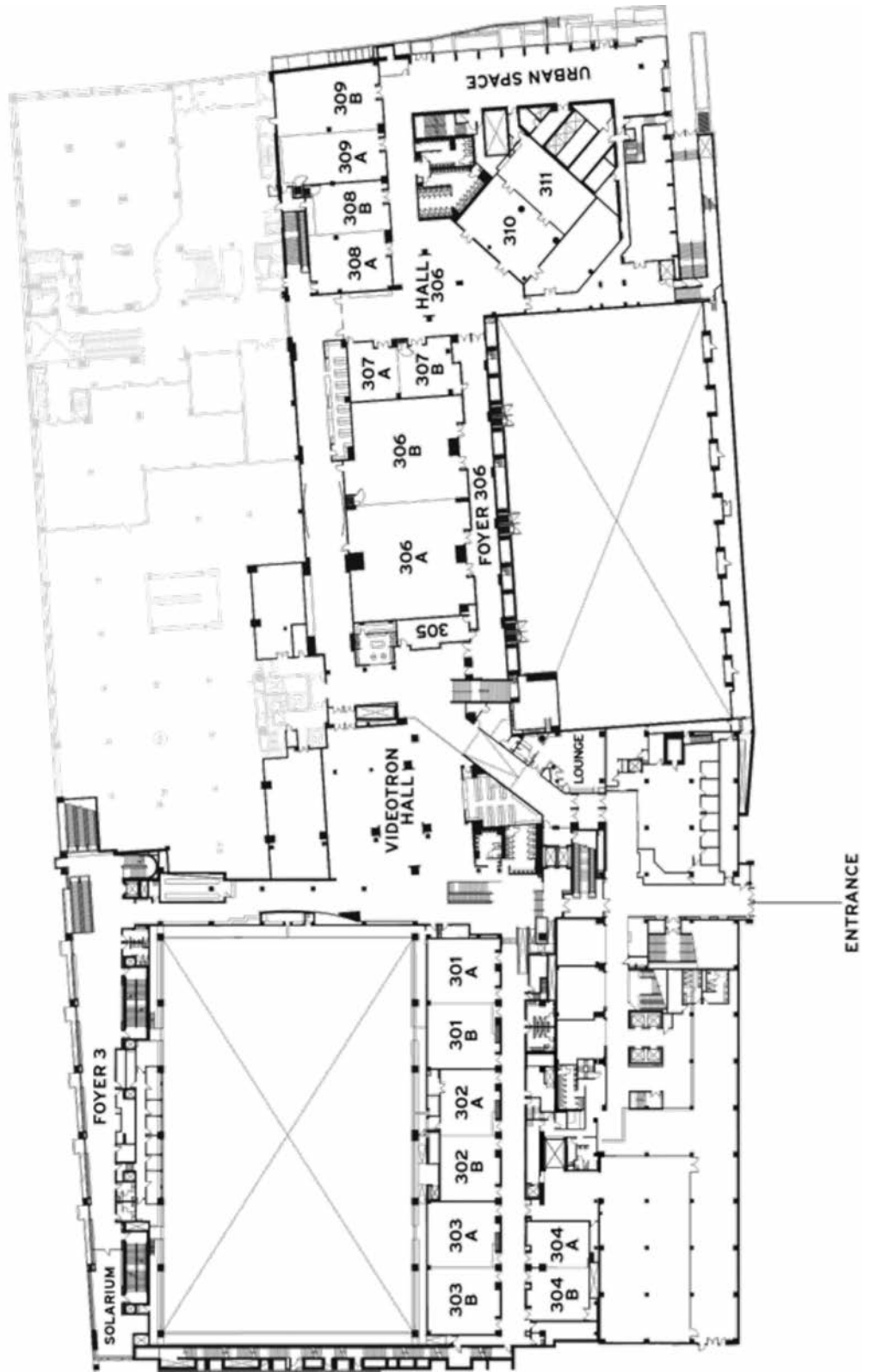
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Level 2

CONVENTION HALL
200 A
200 B
200 C
FOYER 2

201 A
201 B
201 C
202
203 MULTIMEDIA ROOM

204 A
204 B
204 C
205 A
205 B
205 C
206 A
206 B
207
FOYER 206
FOYER 2000

MULTIPURPOSE HALL
2000 A
2000 B
2000 C
2000 D

HALL 2000
2101
2102 A
2102 B
2103
2104A
2104 B
2105

Avenue Honoré-Mercier
HONORÉ-MERCIER ENTRANCE

Level 3

SOLARIUM

FOYER 3

301 A

301 B

302 A

302 B

303 A

303 B

304 A

304 B

VIDEOTRON HALL

LOUNGE

ENTRANCE

305

306 A

306 B

FOYER 306

307 A

307 B

HALL 306

308 A

308 B

309 A

309 B

310

311

URBAN SPACE

AAAI-15
Austin, Texas
January 25–29, 2015

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The purpose of the AAAI conference series is to promote research in artificial intelligence (AI) and scientific exchange among AI researchers, practitioners, scientists, students and engineers in AI and all affiliated disciplines.

AAAI-15 is the Twenty-Ninth AAAI Conference on Artificial Intelligence. It will continue the traditions of previous AAAI conferences with multiple technical tracks, invited speakers, workshops, tutorials, student abstracts, senior member papers, poster sessions, a video competition, and exhibit programs, all selected according to the highest standards. AAAI-15, as the inaugural Winter AAAI conference, will also include special programs that celebrate the past and look into the future. A number of exciting innovations are planned, including additional programs for students and young researchers.

Program Cochairs
Blai Bonet (Universidad Simón Bolívar, Venezuela)
Sven Koenig (University of Southern California, USA)

Timetable for Authors
July 1, 2014 - September 10, 2014: Authors register on the AAAI web site
September 10, 2014: Electronic abstracts due
September 15, 2014: Electronic papers due
October 22 - 24, 2014: Author feedback about initial reviews
November 7, 2014: Notification of acceptance or rejection
November 20, 2014: Camera-ready copy due at AAAI office