AAAI-18 / IAAI-18 / EAAI-18 Conference Program

February 2 – 7, 2018

Hilton New Orleans Riverside Hotel

New Orleans, Louisiana, USA

Thirty-Second AAAI Conference on
Artificial Intelligence

Thirtieth Conference on
Innovative Applications of Artificial Intelligence

Eighth Symposium on
Educational Advances in Artificial Intelligence

Morning	Afternoon	Evening
Friday, February 2		
Tutorial Forum Workshops AAAI/SIGAI DC AIES 2018	Tutorial Forum Workshops AAAI/SIGAI DC AIES 2018	Student Welcome Reception AIES Opening Reception
Saturday, February 3		
Tutorial Forum Workshops AAAI/SIGAI DC EAAI Invited Talk: Goel AIES 2018	Tutorial Forum Workshops AAAI/SIGAI DC EAAI Technical Program AIES 2018	Opening Reception
Sunday, February 4		
AAAI / IAAI Welcome / AAAI Awards Presidential Address: Kambhampati AAAI Classic Paper Award Talk: Noy EAAI Technical Program Exhibits	Lunch with a Fellow IAAI Technical Program IAAI RSE Award Lecture: Smith What's Hot Talks EAAI Award Lecture: Neller / Panels Exhibits	Invited Talk: Choi Poster / Demo Session 1 Fellows Dinner
Monday, February 5		
Women's Mentoring Breakfast AAAI Invited Talk: Isbell HAIC Talks (Knepper/Gal) / Papers IAAI Invited Talk: Babenko AAAI Panels Student Abstract Spotlights Exhibits	Lunch with a Fellow HAIC Talks (Taylor/Parikh) / Papers IAAI Technical Program Senior Member Summary / Blue Sky Talks Exhibits / AI Job Fair	AAAI/IAAI Talk: Ghahramani: Poster / Demo Session 2
Tuesday, February 6		
AAAI Conference Awards AAAI Invited Talk: Dwork IAAI Technical Program Exhibits	Lunch with a Fellow AAAI Invited Talk: Halpern Exhibits	AAAI Community Meeting Poster / Demo Session 3 Games Night
Wednesday, February 7		
AAAI Invited Talk: Liang AAAI Technical Program		

Contents

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Awards

AAAI Special Awards and honors will be presented Sunday, February 4, 8:30 – 8:55 AM, in Grand Ballroom B/C/D on the 1st floor of the New Orleans Hilton. AAAI-18 Awards will be presented on Tuesday, February 6, 8:30 – 8:50 AM in the same location.

2018 AAAI Special Awards & Honors

AAAI Honors and Special Awards will be presented by Thomas Dietterich, Awards Committee chair and AAAI past president, Subbarao Kambhampati, AAAI president, and Yolanda Gil, AAAI president-elect.

2018 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 eight newly elected Fellows for 2018, who will be honored during the annual Fellows dinner on Sunday, February 4:

Nancy Amato (Texas A&M University, USA)
Regina Barzilay (Massachusetts Institute of Technology, USA)
Marie desJardins (University of Maryland, Baltimore County, USA)

AAAI Conference Committee

AAAI Conference Committee Chair
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Julie A Shah (Massachusetts Institute of Technology, USA)

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William Yeoh (Washington University in St. Louis, USA)

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Dave Touretzky (Carnegie Mellon University, USA)

What's Hot Cochairs
Holger Hoos (University of British Columbia, Canada)
Jorge Baier (Pontificia Universidad Católica de Chile)

AAAI/ACM SIGAI Job Market Cochairs
John Dickerson (University of Maryland, USA)
Nicholas Mattei (IBM, USA)

Game Night Coczars
Michael Bowling (University of Alberta, Canada)
Michael Littman (Rutgers University, USA)

Fundraising Cochairs
Jeremy Frank (NASA, USA)
Barry O'Sullivan (University College Cork, Ireland)

Guidebook Program Chair
Blai Bonet (Universidad Simón Bolívar, Venezuela)

Workflow Chair
Felix Wu (Cornell University, USA)

Acknowledgments

Kevin Leyton-Brown (University of British Columbia, Canada)
Dinesh Manocha (University of North Carolina, USA)
Joelle Pineau (McGill University, Canada)
Amit Sheth (Kno.e.sis, Wright State University, USA)
Gaurav Sukhatme (University of Southern California, USA)

Martin Michalowski (University of Minnesota, USA)
Ashish Sabharwal (Allen Institute for Artificial Intelligence, USA)
Ram Sriram (National Institute of Standards and Technology, USA)
Matthew Taylor (Washington State University, USA)
Ingmar Weber (Qatar Computing Research Institute, Qatar)

PROMPT: Algorithm and Tool for Automated Ontology Merging and Alignment
Natasha Noy and Mark Musen

For pioneering ontology matching and integration research, by identifying the specifics of the problem and providing a first innovative solution.

The Classic Paper Award Talk, by Natasha Noy, will be held Sunday, February 4 at 11:30 AM in Newberry/Ascot, 3rd floor, New Orleans Hilton.

2018 Senior Member Recognition

AAAI is pleased to announce the newly elected 2018 AAAI senior members, who are being recognized for their long-term participation in AAAI and their distinction in the field of artificial intelligence.

Ariel Felner (Ben Gurion University, Israel)

2018 AAAI Classic Paper Award

The 2018 AAAI Classic Paper award honors the authors of the following paper deemed most influential from the Seventeenth National Conference on Artificial Intelligence, held in 2000 in Austin, Texas, USA.

2018 Distinguished Service Award

The AAAI Distinguished Service Award recognizes one individual each year for extraordinary service to the AI community. The 2018 recipient is Peter Friedland, who is being recognized for his contributions to the field of artificial intelli-

gence through sustained service nationally in establishing AI R&D at NASA, structuring AI programs at AFOSR, and pioneering service in computational molecular biology.

2018 AAAI/EAAI Outstanding Educator Award

The AAAI/EAAI Outstanding Educator Award was established to recognize a person (or group of people) who has (have) made major contributions to AI education that provide long-lasting benefits to the AI community. The 2018 award is being presented to Todd Neller, for his longstanding dedication and service to the AI education community at large, for curating shared resources, and for advancing and energizing the field of AI education. This award is jointly sponsored by AAAI and the Symposium on Educational Advances in Artificial Intelligence.

2018 Robert S. Engelmore Memorial Award and Lecture

The Robert S. Engelmore Award is sponsored by IAAI-18 and *AI Magazine,* and will be presented by Michael Youngblood and Karen Myers, IAAI-18 chair and cochair, and Ashok Goel, 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 2018 award will be presented to Stephen F. Smith (Carnegie Mellon University) for sustained research excellence in constraint-based planning and scheduling technologies, deployment of those technologies to a range of significant real-world problems, and extensive service to the AI community that includes significant outreach to related technical fields. The lecture will be held on Sunday, February 4, 4:00 PM, in Grand Ballroom B/C/D on the ballroom level of the New Orleans Hilton. (See lecture description on page 9.)

IAAI-18 Deployed Applications Awards

The seven IAAI-18 Deployed Application Awards will be announced during the Opening Ceremony on Sunday, February 4 by IAAI-18 Chair Michael Youngblood and Cochair Karen Myers. Certificates will be presented during paper sessions.

Secure and Automated Enterprise
Revenue Forecasting
Jocelyn Barker, Amita Gajewar, Konstantin Golyaev, Gagan Bansal, Matt Conners

Sketch Worksheets in STEM Classrooms:
Two Deployments
Kenneth D. Forbus, Bridget Garnier, Basil Tikoff, Wayne Marko, Madeline Usher, Matthew McLure

An Automated Employee Timetabling
System for Small Businesses
Richard Hoshino, Aaron Slobodin, William Bernoudy

Horizontal Scaling with a Framework for Providing AI Solutions within a Game Company
John F. Kolen, Mohsen Sardari, Marwan Mattar, Nick Peterson, Meng Wu

Hi, How Can I Help You?: Automating Enterprise IT Support Help Desks
Senthil Mani, Neelamadhav Gantayat, Rahul Aralikatte, Monika Gupta, Sampath Dechu, Anush Sankaran, Shreya Khare, Barry Mitchell, Hemamalini Subramanian, Hema Venkatarangan

Sentient Ascend: AI-Based Massively Multivariate Conversion Rate Optimization
Risto Miikkulainen, Neil Iscoe, Aaron Shagrin, Ryan Rapp, Sam Nazari, Patrick McGrath, Cory Schoolland, Elyas Achkar, Myles Brundage, Jeremy Miller, Jonathan Epstein, Gurmeet Lamba

SmartHS: An AI Platform for Improving Government Service Provision
Yongqing Zheng, Han Yu, Lizhen Cui, Chunyan Miao, Cyril Leung, Qiang Yang

AAAI-18 Awards

The AAAI-18 Awards will be presented by program cochairs Sheila McIlraith and Kilian Weinberger.

AAAI-18 Outstanding Paper Award

This year, AAAI's Conference on Artificial Intelligence honors the following four papers, which exemplify high standards in technical contribution and exposition by regular and student authors.

AAAI-18 Outstanding Paper Award

Memory-Augmented Monte Carlo Tree Search
Chenjun Xiao, Jincheng Mei, Martin Müller

AAAI-18 Outstanding Student Paper Award

Counterfactual Multi-Agent Policy Gradients
Jakob N. Foerster, Gregory Farquhar, Triantafyllos Afouras, Nantas Nardelli, Shimon Whiteson

Outstanding Paper Award, Honorable Mention

Generalized Adjustment Under Confounding and Selection Biases
Juan D. Correa, Jin Tian, Elias Bareinboim

Outstanding Student Paper Award, Honorable Mention

Adapting a Kidney Exchange Algorithm to Align with Human Values
Rachel Freedman, Jana Schaich Borg, Walter Sinnott-Armstrong, John P. Dickerson, Vincent Conitzer

AAAI-18 Blue Sky Idea Awards

AAAI, in cooperation with the Computing Research Association Computing Community Consortium (CCC), is pleased to present three Blue Sky Awards for papers that present ideas and vi-

Tutorial Forum

The AAAI-18 Tutorial Forum is open to all technical registrants for a small fee per tutorial. Half-day tutorials are 4 hours, including breaks; quarter-day tutorials are one hour and 45 minutes with no break. Quarter-day tutorials are denoted by a *Q* at the end of the tutorial code. Tutorial coffee breaks will be held at 10:30 AM and 3:30 PM outside the meeting space on the 2nd and 3rd floors of the hotel.

Friday, February 2

9:00 AM – 1:00 PM

FA1: Adversarial Machine Learning
Bo Li, Dawn Song, Yevgeniy Vorobeychik
Jefferson, 3rd floor

2:00 – 6:00 PM

FP1: A Design Hackathon for "AI for Social Good" K-12 Outreach
Yolanda Gil, Tara Chklovski, Rusty Nye, Allison Colyer
Magazine, 3rd floor

FP2: A Survey of Inverse Reinforcement Learning: Challenges, Methods and Progress
Prashant Doshi, Saurabh Arora
Jefferson, 3rd floor

FP3: Bandit Problems and Algorithms
Csaba Szepesvari, Tor Lattimore
Royal, 3rd floor

FP4: Deep Learning Models for Health Care: Challenges and Solutions
Edward Yoonjae Choi, Sanjay Purushotham, Yan Liu, Jimeng Sun
Commerce, 3rd floor

FP5: Network Representation Learning: Enabling Network Inference in Vector Space
Peng Cui, Wenwu Zhu
Jackson, 3rd floor

4:15 – 6:00 PM

FP6Q: Constraint Learning
Luc De Raedt, Andrea Passerini, Stefano Teso
Fulton, 3rd floor

4:30 – 6:15 PM

FP7Q: Game Theory for Data Science: Eliciting High-Quality Information
Boi Faltings, Goran Radanovic
Parish, 3rd floor

Saturday, February 3

9:00 AM – 1:00 PM

SA1: Cognitive Vision — On Deep Semantics in Visuo-Spatial Computing
Mehul Bhatt, Jakob Suchan
Jackson, 3rd floor

SA2: Computational Solutions against Fake News: AI versus DB Perspectives
Naeemul Hassan, Dongwon Lee
Camp, 3rd floor

SA3: Modelling Planning Domains
Roman Barták, Lukas Chrpa
Canal, 3rd floor

SA4: Rulelog: Highly Expressive Semantic Rules with Scalable Deep Reasoning Networks
Benjamin Grosof, Michael Kifer, Paul Fodor, Janine Bloomfield
Magazine, 3rd floor

SA5: Scalable Deep Learning Using CNTK
Yuqing Tang, Sayan Pathak
Commerce, 3rd floor

SA6: Strategic, Online Learning, and Computational Aspects of Social Network Science
Ramasuri Narayanam, Yadati Narahari
Royal, 3rd floor

8:15 – 10:00 AM

SA7Q: Recent Advances in Structured Prediction
Jana Doppa, Liping Liu, Chao Ma
St. James, 3rd floor

10:15 AM – 12:00 PM

SA9Q: Responsible Artificial Intelligence
Virginia Dignum
St. James, 3rd floor

11:15 AM – 1:00 PM

SA10Q: Multi-Agent Distributed Constrained Optimization
Ferdinando Fioretto, William Yeoh, Roie Zivan
Fulton, 3rd floor

2:00 – 6:00 PM

SP1: Artificial Intelligence and Games
Julian Togelius
Fulton, 3rd floor

SP2: Cognitive Robotics in Industrial Settings Competition
William Harrison III, Erez Karpas, Zeid Kootbally, Tim Niemueller, Craig Schlenoff, Eric Timmons, Tiago Vaquero
Canal, 3rd floor

SP3: Integrating Learning into Reasoning
Brendan Juba, Loizos Michael
Camp, 3rd floor

SP4: Knowledge Graph Construction from Web Corpora
Mayank Kejriwal, Craig Knoblock, Pedro Szekely
Magazine, 3rd floor

SP5: Machine Reading for Precision Medicine
Hoifung Poon, Chris Quirk, Scott Wen-Tau Yih
Commerce, 3rd floor

SP6: When Advanced Machine Learning Meets Intelligent Recommender Systems
Liang Hu, Longbing Cao, Jian Cao, Songlei Jian
Royal, 3rd floor

2:00 – 3:45 PM

SP7Q: Recent Advances and Applications in Markov Logic Networks
Deepak Venugopal, Vibhav Gogate, Vincent Ng
Jackson, 3rd floor

4:15 – 6:00 PM

SP8Q: Implementing Motivation and Emotion in AI Architectures
Joscha Bach
Jackson, 3rd floor

SP9Q: AI Techniques for Price Prediction in Commodity Markets
Ramasuri Narayanam, Rohith Vallam, Ritwik Chaudhuri, Manish Kataria, Gyana Parija, Fatemeh Jahedpari
St. James, 3rd floor

Workshop Program

Registration for a workshop requires a supplemental fee for AAAI-18 technical registrants. Individuals who do not wish to participate in any other AAAI-18 programs or events may elect the workshop only registration fee. Electronic copies of workshop papers were circulated to pre-registrants, and will be available in the AAAI Digital Library post-conference. Workshop coffee breaks will be held at 10:30 AM and 3:30 PM outside the meeting space on the 2nd and 3rd floors of the hotel.

Friday, February 2

W2: AI and Marketing Science
8:30 AM – 6:00 PM, Windsor, 3rd floor

W3: Artificial Intelligence Applied to Assistive Technologies and Smart Environments
9:00 AM – 3:30 PM, Trafalgar, 3rd floor

W4: Artificial Intelligence for Cyber Security
9:00 AM – 5:00 PM, Prince of Wales, 2nd floor

W9: Health Intelligence (two-day workshop)
8:30 AM – 5:15 PM, Marlborough A, 2nd floor

W10: Knowledge Extraction from Games
9:00 AM – 5:00 PM, Norwich, 3rd floor

W12: Planning and Inference
8:00 AM – 5:30 PM, Marlborough B, 2nd floor

W14: Reasoning and Learning for Human-Machine Dialogues
9:00 AM – 5:30 PM, Canal, 3rd floor

W16: Statistical Modeling of Natural Software Corpora
8:30 AM – 6:00 PM, Eglinton/Winton, 2nd floor

Saturday, February 3

W1: Affective Content Analysis
9:00 AM – 5:00 PM, Windsor, 3rd floor

W5: AI for Imperfect-Information Games
9:00 AM – 5:00 PM, Prince of Wales, 2nd floor

W7: Declarative Learning Based Programming
9:00 AM – 5:30 PM, Trafalgar, 3rd floor

W8: Engineering Dependable and Secure Machine Learning Systems
9:00 AM – 5:30 PM, Cambridge, 2nd floor

W9: Health Intelligence (two-day workshop)
9:00 AM – 4:40 PM, Marlborough A, 2nd floor

W11: Plan, Activity, and Intent Recognition
9:00 AM – 5:00 PM, Parish, 3rd floor

W13: Preference Handling
8:45 AM – 5:30 PM, Norwich, 3rd floor

W15: SmartIoT: AI Enhanced IoT Data Processing for Intelligent Applications
9:00 AM – 5:00 PM, Marlborough B, 2nd floor

AAAI-18 Emerging Topic: Human-AI Collaboration

AAAI-18 is pleased to present the special AAAI-18 Emerging Topic Program on Human-AI Collaboration. While AI systems continue to get better at independent perception, learning, and well-defined reasoning tasks, there is emerging interest in designing AI system to complement and enhance, rather than supplant, human capabilities. New technical challenges arise in the development of machines that model and infer the mental and physical state of human counterparts, and apply these models to collaborate with people in richer, more flexible ways. The goal of the emerging topic on Human-machine collaboration at AAAI-18 is to highlight these technical challenges and opportunities, as well as showcase the value of new human-AI partnerships.

The program will include four invited talks and 21 technical papers in full oral and spotlight/poster presentations. The four 30-minute invited talks will be split between two hour-long sessions in the 10:00 AM and 4:00 PM sessions on Monday, February 5.

The papers will be presented in the intervening 11:30 AM and 2:00 PM sessions and one session on Tuesday, February 6. For complete schedule information, please consult the online program.

Monday, February 5, Grand Ballroom A

10:00 – 11:00
Ross Knepper (Cornell Universiy)
Kobi Gal (Ben-Gurion University of the Negev)

4:00 – 5:00
Matthew Taylor (Washington State University)
Devi Parikh (Georgia Institute of Technology)

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sions that can stimulate the research community to pursue new directions, such as new problems, new application domains, or new methodologies. The recipients of the Blue Sky Idea travel awards, sponsored by the CCC, are as follows:

First Place
Engineering Pro-Sociality with Autonomous Agents
Ana Paiva, Fernando Santos and Francisco Santos

Second Place
Learning Fast and Slow: Levels of Learning in General Autonomous Intelligent Agents
John Laird and Shiwali Mohan

Third Place
Imagination Machines: A New Challenge for Artificial Intelligence
Sridhar Mahadevan

AAAI/ACM Conference on AI, Ethics, and Society

Friday and Saturday, February 2–3
Quarterdeck Room, Riverside Complex, 1st floor

As AI is becoming more pervasive in our life, its impact on society is more significant and concerns and issues are raised regarding aspects such as value alignment, data handling and bias, regulations, and workforce displacement. Only a multidisciplinary and multistakeholder effort can find the best ways to address these concerns, including experts of various disciplines, such as ethics, philosophy, economics, sociology, psychology, law, history, and politics. In order to address these issues in a scientific context, AAAI and ACM have joined forces to start this new conference. Attendance at AIES 2018 is available for an additional fee. The full schedule for the AIES 2018 Conference is available at www.aies-conference.com, and will be distributed in hard copy to registered attendees.

The Eighth Symposium on Educational Advances in Artificial Intelligence

Saturday – Sunday, February 3 – 4, Jefferson Ballroom

Registration for EAAI-18 is included in the AAAI-18 technical program registration. Individuals who do not wish to participate in any other AAAI-18 programs or events may select the EAAI-18 only registration fee. The proceedings of the EAAI program are included in the full AAAI-18 proceedings, and electronic copies of all papers are available via the online schedule (Guidebook). EAAI posters will also be presented Sunday, February 4 in the AAAI-18 Poster / Demo Session in Grand Salon C/D. Accepted paper presentations will be 20 minutes each; Model AI Assignment presentations will be 15 minutes each, and poster lightning talks will be 5 minutes each. For full information on invited talks and panels, please see pages 10–11.

Saturday, February 3

9:00 - 9:10 AM

Welcome to EAAI-18

Eric Eaton and Michael Wollowski (EAAI-18 Cochairs)

9:10 – 10:00 AM

Invited Talk

Jill Watson, Family, and Friends: Experiments in Building Automated Teaching Assistants
Ashok Goel (Georgia Tech)

10:00 – 10:20 AM

Main Track

Data Analysis Competition Platform for Educational Purposes: Lessons Learned and Future Challenges
Yukino Baba, Tomoumi Takase, Kyohei Atarashi, Satoshi Oyama, Hisashi Kashima

10:20 – 10:30 AM

Announcement

EAAI-19 Birds of a Feather Undergraduate Research
Todd Neller

10:30 – 11:00 AM

Coffee Break

11:00 AM – 12:00 PM

Thematic Area: Teaching Neural Networks

Chair: Michael Wollowski

Model AI Assignment: Neural Networks for Face Recognition with TensorFlow
Michael Guerzhoy

Model AI Assignment: Understanding How Neural Networks Recognize Faces
Michael Guerzhoy

Lightning Talk: Introducing Machine Learning Concepts by Training a Neural Network to Recognize Hand Gestures
Alessandro Giusti, David Huber, Luca M. Gambardella

Lightning Talk: Mighty Thymio for University-level Educational Robotics
Jérôme Guzzi, Alessandro Giusti, Gianni A. Di Caro, Luca Maria Gambardella

Break-out session: Developing Neural Networks Materials (20 minutes)

The purpose of the break-out session is for participants to form groups interested in developing or refining existing NN assignments. Group members will introduce each other, define outcomes and develop a project plan.

12:00 – 1:30 PM

Lunch Break

1:30 – 2:30 PM

Special Track: Model AI Assignments

Chair: Todd Neller

Biductive Computing: Several Variants of a Universal Paradigm
Joshua Eckroth

Solve a Maze via Search
Nate Derbinsky

Go for a Walk! Pedestrian-Friendly A* with Learned Cost Functions
Zack Butler

Robot Juggling
Ariel Anders

2:30 – 3:30 PM

Special Track: AI for Education I

Chair: Claudia Schulz

Diagnosing University Student Subject Proficiency and Predicting Degree Completion in Vector Space
Yuetian Luo, Zachary A. Pardos

Predictive Modeling of Learning Continuation in Preschool Education Using Temporal Patterns of Development Tests
Junpei Naito, Yukino Baba, Hisashi Kashima, Takenori Takaki, Takuya Funo

Gesturing and Embodiment in Teaching: Investigating the Nonverbal Behavior of Teachers in a Virtual Rehearsal Environment
Roghayeh Barmaki, Charles Hughes

3:30 – 4:00 PM

Coffee Break

4:00 – 4:30 PM

Special Track: Best Practices

Chair: Tom Williams

On the Importance of a Research Data Archive
Benedict Wright, Oliver Brunner, Bernhard Nebel

Break-out session: (10 minutes)

4:30 – 4:50 PM

Announcements

Lightning Talk: A Driving License for Intelligent Systems
Martin Kandlhofer, Gerald Steinbauer

Lightning Talk: Introducing AI to Undergraduate Students via Computer Vision Projects
Kaiman Zeng, Yancheng Li, Yida Xu, Di Wu, Nansong Wu

Proposal for an Undergraduate Consortium at AAAI (10 minutes)
Nate Derbinsky and James Boerkoel

4:50 – 5:00 PM

Brief Break (no coffee)

5:00 – 5:30 PM

New and Future AI Educator Briefs

Sunday, February 4

9:00 – 9:50 AM

AAAI Opening Talk

10:00 – 11:00 AM

Thematic Area: Teaching Ethics

Chair: Michael Wollowski

Introducing Ethical Thinking about Autonomous Vehicles into an AI Course
Heidi Furey, Fred Martin

Model AI Assignment Presentation: A Module on Ethical Thinking about Autonomous Vehicles in an AI Course
Heidi Furey, Fred Martin

Lightning Talk: Addressing the Technical, Philosophical, and Ethical Issues of Artificial Intelligence through Active Learning Class Assignments
Pamela K. Fink

Break-out session: Developing Ethics Materials (20 minutes)

The purpose of the break-out session is for participants to form groups interested in developing or refining existing ethics materials. Group members will introduce each other, define outcomes and develop a project plan.

11:00 – 11:30 AM

Coffee Break

11:30 AM – 12:30 PM

Special Track: AI for Education II

Chair: Eric Eaton

An e-Learning Recommender that Helps Learners Find the Right Materials
Blessing Mbipom, Stewart Massie, Susan Craw

Dropout Model Evaluation in MOOCs
Joshua Gardner, Christopher Brooks

Investigating Active Learning for Concept Prerequisite Learning
Chen Liang, Jianbo Ye, Shuting Wang, Bart Pursel, C. Lee Giles

12:30 – 2:00 PM

Lunch Break

2:00 – 2:50 PM

EAAI-18 Outstanding Educator Talk and Presentation of Award

Todd Neller (Gettysburg College)

2:50 – 3:30 PM

Panel Discussion

Next Big Steps in AI for Education
Moderator: Claudia Schulz (TU Darmstadt)
Panelists include Ashok Goel (Georgia Tech), Todd Neller (Gettysburg College)

3:30 – 4:00 PM

Coffee Break

4:00 – 4:30 PM

Panel Discussion

Nontraditional Research Experiences for Undergraduates
Moderator: Joshua Eckroth (Stetson University)
Panelists incude Sven Koenig (USC), Nate Derbinsky (Northeastern University)

4:30 – 5:30 PM

K-12 Outreach

Introduction by Sheila Tejada and David Touretzky

Demos of Cozmo Robot Projects
Participants in this undergraduate student workshop will learn how to program the Cozmo robot and create a demo, game, or other interactive activity that illustrates how artificial intelligence enables autonomous robots. They will test their creations with K-12 students at an outreach event at the Louisiana Children's Museum and give demonstrations during the conference to AAAI and EAAI attendees.

AAAI Presidential Address

Challenges of Human-Aware AI Systems

Subbarao Kambhampati (Arizona State University, USA)

Sunday, February 4, 9:00 – 9:50 AM — Grand Ballroom B/C/D, 1st floor

Research in AI suffers from a longstanding ambivalence to humans — swinging as it does, between their replacement and augmentation. Now, as AI technologies enter our everyday lives at an ever increasing pace, there is a greater need for AI systems to work synergistically with humans. To do this effectively, AI systems must pay more attention to aspects of intelligence that helped humans work with each other — including emotional and social intelligence.

I will discuss the research challenges in designing such human-aware AI systems, including modeling the mental states of humans in the loop, recognizing their desires and intentions, providing proactive support, exhibiting explicable behavior, giving cogent explanations on demand, and engendering trust. I will survey the progress made so far on these challenges, and highlight some promising directions. I will also touch on the additional ethical quandaries that such systems pose. I will end by arguing that the quest for human-aware AI systems broadens the scope of AI enterprise, necessitates and facilitates true interdisciplinary collaborations, and can go a long way towards increasing public acceptance of AI technologies.

Subbarao Kambhampati (Rao) is a professor of computer science at Arizona State University. He received his B.Tech. in electrical engineering (electronics) from Indian Institute of Technology, Madras (1983), and M.S.(1985) and Ph.D.(1989) in computer science (1985,1989) from University of Maryland, College Park. Kambhampati studies fundamental problems in planning and decision making, motivated in particular by the challenges of human-aware AI systems.

Kambhampati is a Fellow of AAAI and AAAS, and was an NSF Young Investigator. He received multiple teaching awards, including a university last lecture recognition. Kambhampati served as the technical program cochair of AAAI 2005, as a AAAI Councilor and as AAAI Conference Committee chair, before being elected as the president of AAAI. He is also a trustee of IJCAI and was the program chair for IJCAI 2016. He serves on the board of directors of Partnership on AI. Other roles include program cochair of AIPS 2000 and ICAPS 2013. Kambhampati's research as well as his views on the progress and societal impacts of AI have been featured in multiple national and international media outlets. Further information available at rakaposhi.eas.asu.edu.

Robert S. Engelmore Memorial Award Lecture

Smart Infrastructure for Future Urban Mobility

Stephen Smith (Carnegie Mellon University, USA)

Sunday, February 4, 4:00 – 5:00 PM — Grand Ballroom B/C/D, 1st floor

Real-time traffic signal control presents a challenging multi-agent planning problem, particularly in urban road networks where (unlike simpler arterial settings) there are competing dominant traffic flows that shift through the day. Further complicating matters, urban environments require attention to multimodal traffic flows (vehicles, pedestrians, bicyclists, buses) that move at different speeds and may be given different priorities. For the past several years, my research group has been evolving an adaptive traffic signal control system to address these challenges, referred to as Surtrac (Scalable Urban TRAffic Control). Combining principles from automated planning and scheduling, multi-agent systems, and traffic theory, Surtrac treats traffic signal control as a decentralized online planning process. In operation, each intersection repeatedly generates and executes (in rolling horizon fashion) signal-timing plans that optimize the movement of currently sensed approaching traffic through the intersection. Each time a new plan is produced (nominally every couple of seconds) the intersection communicates to its downstream neighbors what traffic it expects to send their way (according to the plan), allowing intersections to construct longer horizon plans and achieve coordinated behavior. Initial deployment of Surtrac in the east end of Pittsburgh PA has produced significant performance improvements and the technology is now being installed in other US cities. More recent work focuses on a broader future vision of smart transportation infrastructure where, as vehicles become more connected and more autonomous, the intersection increasingly becomes the gateway to real-time traffic information and navigation intelligence. Current technology development efforts center on use of direct vehicle- (and pedestrian-) to-infrastructure communication to further enhance mobility, online analysis of traffic flow information for real-time incident detection, and integrated optimization of signal control and route choice decisions. In this talk, I'll provide an overview of this overall research effort.

Stephen Smith is a research professor in the Robotics Institute at Carnegie Mellon University, where he heads the Intelligent Coordination and Logistics Laboratory. He is also cofounder and CEO of Rapid Flow Technologies, an intelligent transportations systems technology company that is commercializing the Surtrac traffic signal control system. Smith's research focuses broadly on the theory and practice of next-generation technologies for planning, scheduling, and coordination. He pioneered the development and use of constraint-based search and optimization models for solving planning and scheduling problems, and has successfully fielded AI-based planning and scheduling systems in several complex application domains. Smith has published over 270 papers on these and related subjects. He is a former AAAI Executive Council member, an AAAI Fellow, is associate editor of the *Journal of Scheduling,* and serves on the editorial boards of *Constraints* and *ACM Transactions on Intelligent Systems and Technology.*

Senior Member Presentations

Monday, February 5, Port / Starboard, Riverside Complex
11:30 AM – 12:30 PM (Summary) and 2:00 – 3:30 PM (Blue Sky)

The AAAI-18 Senior Member Presentation track comprises two subtracks: Summary Talks: established researchers provide broad talks on a well-developed body of research or an important new research area; and Blue Sky Talks: authors present ideas and visions that can stimulate the research community to pursue new directions, such as new problems, new application domains, or new methodologies, that are likely to stimulate significant new research. Three summary talks and five Blue Sky talks will be presented (please see the online conference schedule for exact times). For more information about the Blue Sky Awards, please see pages 5, 7.

Invited Presentations, Panels, What's Hot Talks

AAAI-18 and IAAI-18 Invited Presentations will be held in Grand Ballroom B/C/D, Sunday – Wednesday, February 4–7. EAAI-18 Invited Presentations will be held in Jefferson Ballroom, February 3–4. AAAI Panels will be held in Grand Salon 9. Please consult the online paper schedule for listings of the Senior Member and What's Hot Talks.

Saturday, February 3

9:10 – 10:00 AM
EAAI-18 Invited Talk:

Jill Watson, Family, and Friends: Experiments in Building Automated Teaching Assistants

Ashok Goel (Georgia Tech)

Ashok Goel is a professor of computer science in the School of Interactive Computing at Georgia Institute of Technology in Atlanta, USA. He is also the director of Georgia Tech's Ph.D. program in human-centered computing. For more than thirty years, Ashok has conducted research into artificial intelligence, cognitive science and human-centered computing, with a focus on computational design, modeling and creativity. He is the editor-in-chief of *AI Magazine* and an associate editor of DRS' *Design Science Journal*. Goel serves on Georgia Tech's Commission on Next in Education, and coleads its task forces on Future of Pedagogy and Future Learning Systems. As part of Georgia Tech's online MS in CS program, he developed an early, popular, online graduate-level course in artificial intelligence, and as part of this class, he pioneered the development of Jill Watson, a virtual teaching assistant for answering questions in online discussion forums (www.youtube.com/watch?v=WbCguICyfTA). The Chronicle of Higher Education recently included virtual assistants exemplified by Jill Watson in its list of transformative educational technologies over the last fifty years.

Sunday, February 4

8:30 – 8:55 AM
AAAI-18/IAAI-18 Welcome and Opening Remarks, AAAI Organizational Awards/Honors

9:00 – 9:50 AM
AAAI-18 Presidential Address:

Challenges of Human-Aware AI Systems

Subbarao Kambhampati (Arizona State University, USA)

Please see talk description on page 9.

4:00 – 5:00 PM
IAAI-18 Robert S. Engelmore Award Lecture:

Smart Infrastructure for Future Urban Mobility

Stephen Smith (Carnegie Mellon University, USA)

Please see talk description on page 9.

2:00 – 2:50 PM
AAAI-18 / EAAI-18 Outstanding Educator Award Lecture:

Playful AI Education

Todd Neller (Gettysburg College)

Diane Ackerman observed, "Play is our brain's favorite way of learning." When thinking of games in AI education, we usually think of Tic-Tac-Toe and game-tree search. Beyond this well-beaten path, we will look more generally at the use of games throughout AI education. Beginning with a discussion of what makes a game especially good for educational purposes, we next look at what playful problem domains can bring to educational experiences throughout various AI subfields. We conclude with a look forward at goals and challenges for playful AI education.

2:50 – 3:30 PM
EAAI-18 Panel:

Next Big Steps in AI for Education

Moderated by Claudia Schulz (TU Darmstadt)
Panelists: Ashok Goel (Georgia Tech), Todd Neller (Gettysburg College)

The purpose of this panel is to look ahead and identify areas and topics in which AI might play a role in education.

4:00 – 4:30 PM
EAAI-18 Panel:

Non-Traditional Research Experiences for Undergraduates

Moderator: Joshua Eckroth (Stetson University)
Panelists: Sven Koenig (USC), Nate Derbinsky (Northeastern University)

We will open a discussion about opportunities for students outside of traditional NSF-funded REU experiences, for example, research-focused courses or senior projects, internships, competitions such as Kaggle, and other informal research experiences. We hope to uncover new ideas about how students may discover and engage in these activities, often under the mentorship of faculty, and ultimately produce publications, presentations, or other artifacts.

5:10 PM – 6:10 PM
AAAI-18 Invited Talk:

From Naive Physics to Connotation: Learning and Reasoning about the World Using Language

Yejin Choi (University of Washington, USA)

Intelligent communication requires reading between the lines, which in turn, requires rich background knowledge about how the world works. However, learning unspoken commonsense knowledge from language is nontrivial, as people rarely state the obvious, such as, "my house is bigger than me." In this talk, I will discuss how we can recover the trivial everyday knowledge just from language without an embodied agent. A key insight is this: the implicit knowledge people share and assume systematically influences the way people use language, which provides indirect clues to reason about the world. For example, if "Jen entered her house," it must be that her house is bigger than her. In this talk, I will first present how we can organize various aspects of commonsense — ranging from naive physics knowledge to more abstract connotations — by adapting representations of frame semantics. I will then discuss neural network approaches that complement the frame-centric approaches. I will conclude the talk by discussing the challenges in current models and formalisms, pointing to avenues for future research.

Monday, February 5

9:00 – 9:50 AM
AAAI-18 Invited Talk:

How Machines Learn Best from Humans

Charles Isbell (Georgia Institute of Technology, USA) (Sponsored by Lionbridge)

We build machine-learning systems because we want them to behave a certain way. In this case, the "we" is usually human beings. Whether we want to convey particular strategies or subtle preferences that define the objective itself, some form of knowledge transfer from person to algorithm is always needed. Interactive machine learning focuses on techniques for facilitating that transfer in the context of solving artificial intelligence problems with machine-learning techniques. This talk will survey some of the problems and techniques studied in interactive machine learning with a special emphasis on counterintuitive design principles that have arisen from the results of experiments with human participants especially where those counterintuitive principles arise from "we" being wrong about "us."

10:00 – 11:00 AM
IAAI-18 Invited Talk:

Leveraging AI and Geospatial Data to Understand the Earth at Scale

Boris Babenko (Orbital Insight, USA)

Orbital Insight is a geospatial analytics company leveraging the rapidly growing availability of satellite, UAV, and other geospatial data sources, to understand and characterize socioeconomic trends at global, regional, and hyperlocal scales. In this talk I'll first discuss the satellite imagery domain, how it's evolving, and the various advantages and challenges of working with such imagery. I will also cover several examples of computer vision modules we have built using deep learning, and some lessons learned. Finally, I'll talk about practical considerations of rapidly prototyping and productionizing computer vision / deep learning models.

10:00 – 11:00 AM
AAAI-18 Panel:

Federal Funding Agency Information Panel / Meet and Greet

Moderators: James Donlon (National Science Foundation), Reid Simmons (National Science Foundation)
Panelists: Jeff Alstott (IARPA), Liyi Dai (ARO),

AAAI-18 Social and Special Events

AAAI Opening Reception

Saturday, February 3, 6:00 PM – 7:30 PM
St. Charles Ballroom, 3rd floor

The AAAI-18 Opening Reception will be held in the St. Charles Ballroom of the Hilton New Orleans Riverside. A variety of heavy 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-18 technical registration. A $125.00 per person fee ($20.00 for children over the age of 12) will be charged for guests and other nontechnical conference registrants.

AAAI-18 Poster / Demo Sessions

Sunday, February 4:   6:30 PM – 8:30 PM
Monday, February 5:   6:30 PM – 8:30 PM
Tuesday, February 6:   6:30 AM – 8:30 PM
Grand Salon C/D, 1st floor

Each AAAI-18 poster / demo session will include posters by authors who presented poster spotlights that day (please see schedule for detail). In addition, a total of 15 technical demos will be divided among the three evening sessions. Sunday evening will also include Doctoral Consortium and EAAI posters. Student abstract posters will be presented Sunday, Monday and Tuesday evenings. For a listing of posters and demos, please see the online technical schedule via Guidebook and the AAAI-18 Poster/Demo Program Guide.

Poster / Demo sessions will include light suppers and complimentary soft drinks. A no-host bar will also be available. Admittance to the reception is included in the AAAI-18 registration. A $65.00 per person fee ($15.00 for children over the age of 12) will be charged for guests and other nontechnical conference registrants per night.

AAAI Game Night

Tuesday, February 6, 8:00 – 10:00 pm
Jefferson Ballroom, 3rd floor
Come spend an evening playing games with other AAAI participants at the fifth annual AAAI Games Night. There will be organized AI-themed games. Bring your own games to play afterwards.

For additional social events specifically designed for students, please see page 12.

Peter Friedland (AFRL/AFOSR), Jennifer Roberts (DARPA)

Program officers from federal agencies, including NSF, DARPA, IARPA, ARO, and AFRL/AFOSR will present information on current and anticipated funding opportunities relevant to the AI community. Afterwards, stay for informal discussion with these representatives.

11:30 AM – 12:30 PM
AAAI-18 Panel:
AI Index — What Next?

Panelists: Yoav Shoham (Stanford University), C. Raymond Perrault (SRI International), Erik Brynjolfsson (MIT Sloane School)

The AI Index is an initiative to track, collate, distill and visualize data relating to artificial intelligence. It aspires to be a comprehensive resource of data and analysis for policymakers, researchers, executives, journalists and others to rapidly develop intuitions about the complex field of AI. The panel will present highlights from the recently released first report of the Index, and engage with the audience about what directions the Index should take in the future.

5:10 – 6:10 PM
AAAI-18 / IAAI-18 Joint Invited Talk:
Probabilistic Machine Learning and AI

Zoubin Ghahramani (University of Cambridge / Uber, UK)

Probability theory provides a mathematical framework for understanding learning and for building rational intelligent systems. I will review the foundations of the field of probabilistic AI. I will then highlight some current areas of research at the frontiers, touching on topics such as Bayesian deep learning, probabilistic programming, Bayesian optimisation, and AI for data science.

Tuesday, February 6

8:50 – 9:50 AM
AAAI-18 Invited Talk:
Fair Questions

Cynthia Dwork (Harvard / Radcliffe Institute for Advanced Study)

"Unfairness" of algorithms – for tasks ranging from advertising to recidivism prediction – has attracted considerable attention in the popular press. Algorithmic techniques for achieving fairness now routinely appear in dedicated workshops and symposia as well as in established research conferences. This talk will focus on the (relatively) new study of a mathematically rigorous theory of fairness: definitions, methods, and provable limits and tradeoffs, providing a lens for hot-button policy issues such as "interpretability" and raising new questions for future research.

4:00 – 5:00 PM
AAAI-18 Invited Talk:
Actual Causality: A Survey

Joseph Halpern (Cornell University, USA)

What does it mean that an event C "actually caused" event E? The problem of defining actual causation goes beyond mere philosophical speculation. For example, in many legal arguments, it is precisely what needs to be established in order to determine responsibility. (What exactly was the actual cause of the car accident or the medical problem?) The philosophy literature has been struggling with the problem of defining causality since the days of Hume, in the 1700s. Many of the definitions have been couched in terms of counterfactuals. (C is a cause of E if, had C not happened, then E would not have happened.) In 2001, Judea Pearl and I introduced a new definition of actual cause, using Pearl's notion of structural equations to model counterfactuals. The definition has been revised twice since then, extended to deal with notions like "responsibility" and "blame", and applied in databases and program verification. I survey the last 15 years of work here, including joint work with Judea Pearl, Hana Chockler, and Chris Hitchcock. The talk will be completely self-contained.

Wednesday, February 7

8:50 – 9:50 AM
AAAI-18 Invited Talk:
How Should We Evaluate Machine Learning for AI?

Percy Liang (Stanford University, USA)

Machine learning has undoubtedly been hugely successful in driving progress in AI, but it implicitly brings with it the train-test evaluation paradigm. This standard evaluation only encourages behavior that is good on average; it does not ensure robustness as demonstrated by adversarial examples, and it breaks down for tasks such as dialogue that are interactive or do not have a correct answer. In this talk, I will describe alternative evaluation paradigms with a focus on natural language understanding tasks, and discuss ramifications for guiding progress in AI in meaningful directions.

What's Hot Talks

Sunday, February 4, 2:00 – 3:30 PM,
Camp, 3rd floor

The AAAI-18 "What's Hot" track aims to present exciting recent advances and current challenges in subareas of Artificial Intelligence with major conferences or competitions. Six "What's Hot" presentations will be presented, representing the ICAPS, SoCS, SAT, CP, IJCAI, and AAMAS conferences (please see the online conference schedule for exact times).

Student Activities and Outreach

In cooperation with and with support from *AI Journal,* AAAI is pleased to offer the following student activities designed to enrich the student experience at the AAAI conference. For complete information about student programs at AAAI-18, please see aaai.org/Conferences/AAAI-18/aaai-18-student-activities-overview.

Student Welcome Reception

Friday, February 2, 7:00 – 8:00 PM, Jefferson Ballroom

All students are welcome at the AAAI-18 Student Welcome Reception. Light refreshments will be served. The student welcome reception is sponsored by the USC/Information Sciences Institute

Dining/Group Meals

A student coordinator will be organizing informal opportunities for students to eat together for lunches and dinners at various casual restaurants near the conference venue. Students will be expected to pay for their own meals. Some groups will be available based on research or career interests, while others will be general groups.

AAAI/SIGAI Doctoral Consortium (DC)

Friday and Saturday, February 2 – 3
Newberry/Ascot, 3rd floor

The Twenty-Third AAAI/SIGAI 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 nineteen students accepted to participate in this program will also participate in the AAAI-18 evening Poster / Demo Session 1 on Sunday, February 4.

All interested AAAI-18 student registrants are invited to observe the presentations and participate in discussions at the workshop.

AAAI and SIGAI gratefully acknowledge the generous grants from *AI Journal,* the National Science Foundation, and David E. Smith, which make this program possible. The schedule is available at researcher.watson.ibm.com/researcher/view_group.php?id=8033

AAAI Fellow / Student Lunches

Sunday – Tuesday, February 4 – 6, 12:30 – 2:00 PM

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 will be available AFTER 3:00 PM on Saturday, February 3 at the onsite registration desk adjacent to The District on the third floor of the Hilton. Students should meet their designated Fellow in onsite registration on their assigned day.

AAAI/SIGAI AI Job Fair

Monday, February 5, 4:00 – 6:00 PM
Tabletop exhibits: The District and Jefferson Ballroom, 3rd floor
2-Minute Company Presentations: Jefferson Ballroom, 3rd floor

The AAAI and ACM SIGAI AI Job Fair will provide an opportunity for a host of companies and institutions to highlight their current job opportunities. The short presentations will be preceded and followed by meet-and-greet sessions. Over 20 employers will be participating. Be sure to stop here before heading to the evening poster and demo session. For a list of participating companies and a schedule of presentations, please see the online schedule and www.aaaijob-2018.preflib.org.

Breakfast with Champions: A Women's Mentoring Event

Monday, February 5, 7:30 – 8:45 AM
Jefferson Ballroom, 3rd floor

AAAI is holding the fourth annual women's mentoring event for women students and junior women professionals to meet with senior women in computer science and/or artificial intelligence. Preregistration was required and admittance is by ticket only. Sponsored by *AI Journal* and AAAI.

Student Abstract and Poster Program

Tuesday, February 4 – 6, Grand Salon C/D

Oral Presentations: 10:00 – 11:00 AM, Monday, February 5, Grand Salon 7
Poster Presentations: 6:30 – 8:30 PM, Sunday – Tuesday, February 4–6.

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. Students who have been selected as part of a group of 19 finalists to compete for the Best Student 3-Minute Presentation will present their work in 3-minute spotlight talks in parallel with other technical sessions. These students will present their posters on Monday evening during the conference-wide poster/demo session. The remaining student abstract posters will be presented on Sunday and Tuesday evenings. An award will also be presented for the Best Student Poster. For a list of posters each night, please see the online schedule and the AAAI-18 Poster/Demo Program Guide.

AAAI-18 Games Night

Tuesday, February 6, 8:00 – 10:00 PM
Jefferson Ballroom

Come spend an evening playing games with other AAAI participants at the fifth annual AAAI Games Night. There will be organized AI-themed games. Bring your own games to play afterwards.

Sponsor and Exhibit Program

Sunday – Tuesday, February 4 – 6
The District, 3rd floor

The AAAI-18 sponsor and exhibit program provides an opportunity for AI-related companies and publishers to support the goals of AAAI and reach out to AI professionals. In some cases, sponsors have elected to exhibit at AAAI-18. AAAI wishes to thank all sponsors and exhibitors for their participation at AAAI-18!

Exhibit Hours

Sunday, February 4: 10:00 AM – 5:00 PM
Monday, February 5: 10:00 AM – 4:00 PM
(Job Fair: 4:00 – 6:00 PM)
Tuesday, February 6: 10:00 AM – 4:00 PM SS

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Sponsor
AI Journal

ijcai.org/aijd.php

Artificial Intelligence Journal (AIJ) is one of the longest established and most respected journals in AI, and since it was founded in 1970, it has

published many of the key papers in the field. The operation of the editorial board is supported financially through an arrangement with AIJ's publisher, Elsevier. The editorial board of *Artificial Intelligence* is now in the unique position of being able to make available substantial funds, of the order of EUR 240,000 per annum to support the promotion and dissemination of AI research.

Exhibitor
AITopics
AITopics.org

AITopics is the premier source of information about AI. Stop by the AITopics booth to pick up a luggage tag! Sign up for the free AI-Alert service — a weekly digest of artificial intelligence news from around the world — automatically selected and enriched by AI technology! See what AITopics can provide for your classroom instruction or term papers. Suggest improvements. Review our list of classic papers to add your favorites.

Sponsor / Exhibitor
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Exhibitor
Cambridge University Press
www.cambridge.org/academic

Cambridge University Press is a not-for-profit organization that dates from 1534 and is part of the University of Cambridge. Our mission is to unlock people's potential with the best learning and research solutions by combining state-of-the-art content with the highest standards of scholarship, writing and production.

Exhibitor
Clearpath Robotics
www.clearpathrobotics.com

Clearpath Robotics is a global leader in unmanned vehicle robotics for research and development, and provides hardware, software and services to enable self-driving vehicle development, deployment, and operation. Clearpath works with over 500 of the world's most innovative brands in over 40 countries, serving markets that span industrial materials handling, mining, military, agriculture, aerospace, and academia.

Sponsor
CRA Computing Community Consortium
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The mission of the Computing Research Association's Computing Community Consortium (CCC) is to catalyze the computing research community and enable the pursuit of innovative, high-impact research. CCC conducts activities that strengthen the research community, articulate compelling research visions, and align those visions with pressing national and global challenges. CCC communicates the importance of those visions to policymakers, government and industry stakeholders, the public, and the research community itself.

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Google

research.google.com

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iMerit

imerit.net

iMerit is an on-demand digital data services company delivering data, content, and machine learning services, to global companies. iMerit's services use human intelligence to enable advanced computing capabilities. iMerit delivers services at above-industry standard quality and security, while effecting positive social and economic change by employing marginalized millennials and women from rural and developing communities.

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kcis.iiit.ac.in

Kohli Centre on Intelligent Systems (KCIS) at IIIT Hyderabad, established with significant endowments from TCS, is the largest AI centre in India with strong groups in NLP, Computer Vision, IR, Robotics, ML, Data Science, Cognitive Science, etc. KCIS provides opportunities for researchers and visitors to work on challenging and socially relevant problems along with government and Industry.

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lyft.com/level5

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Morgan & Claypool publishes the Synthesis Lectures on Artificial Intelligence and Machine Learning, edited by Ronald Brachman and Peter Stone. Synthesis lectures are 75 to 200 page electronic documents presenting key topics written by prominent contributors for an audience of students, researchers, and developers. Morgan & Claypool offers content in a wide variety of op-

tions including print, individual eBooks (PDF, ePub), and scalable digital libraries for institutions. New titles in the series include *Game Theory for Data Science* by Boi Faltings and Goran Radanovic, *Multi-Objective Decision Making* by Diederik Roijers and Shimon Whiteson, and *Predicting Human Decision-Making* by Ariel Rosenfeld and Sarit Kraus. *Contact:* info@morganclaypool.com

Sponsor / Exhibitor
Nissan North America
www.nissan-global.com/EN/NRC/ABOUTUS/#page2

We believe that in an era of unpredictable change, the mission of the Nissan Research Center is to create new values to contribute to the mobility society of the future. There are four key societal trends that we track in connection with this mission: the electrification of mobility, the aging of society, the formation of new information services and the urbanization of populations. In our four key research domains corresponding to these trends, we seek to offer new values, considering things like what the automobile can do as a means of mobility, what we can do with our technologies and how we can contribute to society from today forward.

Sponsor / Exhibitor
RIKEN
aip.riken.jp

RIKEN is Japan's largest comprehensive research institution renowned for high-quality research in a diverse range of scientific disciplines. Founded in 1917 as a private research foundation in Tokyo, RIKEN has grown rapidly in size and scope, today encompassing a network of world-class research centers and institutes across Japan. The Center for Advanced Intelligence Project (AIP) was founded in 2016 as a research center for the MEXT-AIP Project. We have fully started our research activities in 2017 mainly in our newly opened Tokyo Office.

Sponsor / Exhibitor
Smart Information Flow Technologies (SIFT)
www.SIFT.net

SIFT researchers span fields from automated planning and plan recognition, machine learning, natural language processing and information integration, to psychology, sociology, and control theory. We perform cutting-edge research on autonomous systems for Earth and space, methods for finding and fixing cyber-physical system vulnerabilities, human interfaces for intelligent systems, and much more. We answer questions like, "How can bee behavior inform drone control?" "Can games effectively improve sleep behaviors?" and "Can automated reading of Mars astronaut texts provide them

feedback on team health?" If you're interested in working with top-notch researchers in a small, flexible company, come talk to us. *Contact:* contact@SIFT.net

Sponsor / Exhibitor
Stottler Henke
www.stottlerhenke.com

Stottler Henke Associates, Inc. creates and applies artificial intelligence (AI) and other advanced software technologies to solve problems that defy solution using traditional approaches. Stottler Henke develops intelligent software solutions for planning and scheduling, task and decision support, knowledge management and discovery, education and training, and autonomous systems. We combine broad artificial intelligence expertise and technologies with skills in expert knowledge elicitation, requirements analysis, software and database design and implementation, data analysis and visualization, and user interface design to deliver innovative yet practical software solutions.

Sponsor / Exhibitor
Sony
dl.sony.com

Sony Network Communications, a company of Sony groups, has consistently offered high-quality telecommunications services. Sony Network Communications made its Neural Network Console software, which provides an integrated development environment for creating deep-learning based programs. Program engineers and designers are able to make use of this intuitive user interfaced software, which comes with a full-fledged GUI, to develop deep learning programs and incorporate them into their products and services. Furthermore, its core libraries (Neural Network Libraries) was made available in open source in June 2017.

Exhibitor
AAAI-18 Student Outreach
www.csavvy.org/AAAI18outreach

The 2018 outreach program features the Cozmo robot by Anki and the Calypso robot intelligence framework by Visionary Machines LLC. Cozmo is a consumer robot with built-in artificial intelligence, including object and face recognition speech synthesis, path planning, and navigation. The Calypso software makes it easy for anyone to program Cozmo and visualize the robot's representation of the world.

Sponsor / Exhibitor
Tencent
www.tencent.com/en-us/index.html

Tencent uses technology to enrich the lives of Internet users. Every day, hundreds of millions of people communicate, share experiences, consume information, and seek entertainment

through our diversified services including QQ, Weixin/WeChat for communications; Qzone for social networking; Tencent Games for entertainment; Tencent News and Tencent Video for information and content. In 2017, the monthly active user accounts of QQ reached 861 million, while those of Weixin and WeChat combinedly reached 938 million. Meanwhile, we seek to evolve with the Internet by investing in the development of artificial intelligence. Our research facilities endeavor to advance the state of the art of machine learning, computer vision, speech recognition and natural language processing. Built on massive data from Tencent's vast community of users, its powerful computing capabilities, accumulated expertise and technical advantages in the vertical fields of the Internet, our team leads the forces that convert AI advances into tangible and usable features for a plethora of apps and services.

Sponsor / Exhibitor
Uber
uber.ai

Uber's mission is to bring transportation — for everyone, everywhere. More than five billion trips later, we've started tackling even greater challenges: making transportation safer with self-driving cars, delivering food quickly and affordably with Uber Eats, and reducing congestion in cities by getting more people into fewer cars. AI and machine learning are core to Uber's mission and technology. Uber AI Labs was founded in 2016 with the aim is to be at the cutting edge of artificial intelligence and machine learning research, and to use this research to help solve Uber's most pressing problems. We offer an environment where research can be published and open-sourced, as well as the possibility to have tremendous real-world impact.

Sponsor
University of Southern California / Information Sciences Institute
www.isi.edu

ISI is home to more than one hundred and thirty researchers and PhD students in artificial intelligence. ISI is part of USC's School of Engineering, currently ranked in the top ten in the country due in part to ISI's standing. AI research areas include natural language processing, information integration, knowledge capture, complex networks, human behavior, and semantic web. If interested, please email ai-contact@isi.edu.

Sponsor / Exhibitor
Shanghai Xiaoi Robot Technology Co.,Ltd
www.xiaoi.com

Shanghai Xiaoi Robot Technology Co., Ltd, (Xiaoi) is the world's leading AI technology and industrialization platform provider. It has set up a

complete AI core technology and industrialization service system which includes knowledge representation, inference and prediction, machine learning (deep learning), semantic understanding, analysis and decision making, machine vision, and speech recognition/generation. Xiaoi's business covers telecommunications, financial services, government, legal, healthcare, manufacture, and other various industries, providing services to hundreds of large and medium enterprises and government agencies, as well as thousands of small enterprises and developers. Its users have exceeded 800 million.

Schedule Information

Included on page 8 is the full EAAI schedule, and the technical session locations for AAAI/IAAI. Please note that EAAI overlaps AAAI/IAAI on Sunday, February 4. The full list of AAAI and IAAI papers is available in the online schedule and via the AAAI-18 Guidebook app. Hard copies of the schedule are available in onsite registration for individuals who do not have online access

General Information

ADA Accessibility

The Hilton New Orleans Riverside Hotel is an Americans with Disabilities Act (ADA) compliant facility. The facility design includes accessible parking and entrances, wheelchair ramps, multiple elevators, automatic doors and accessible restroom facilities.

Admission

Each conference attendee will receive a name badge upon registration. This badge is required for admittance to the technical, AIES, IAAI, EAAI, AI Job Fair, tutorial, and workshop pro-

grams, as well as all social events. The Hilton New Orleans Riverside Hotel is a smoke-free facility, and smoking is strictly forbidden in all meeting and sleeping rooms, as well as public areas.

Business Center (FedEx Office)

A FedEx Office (business center) is located on the second floor of the Hilton New Orleans Riverside near the Atruim. The center is Monday – Friday 7 AM – 7 PM, Saturday 8 AM – 3 PM and Sunday 10 AM – 5 PM. Self service is available 24 hours with a room key.

Career Information

A general information table 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. Please also visit the AI Job Fair for additional career information.

Family Friendly Initiative

Trafalgar room, 3rd floor
AAAI has arranged for a room (Sunday – Wednesday) for young family needs and for families to relax between sessions. We ask that you be respectful of others' privacy, as this room may be used by nursing mothers. The room locks from the inside when being used privately. In addition, we welcome young children (under 12) at all AAAI social events, such as the reception or poster/demo receptions, for no additional charge. If your child would like a souvenir of attendance at the conference, please come by registration for a badge!

Internet Access

AAAI-18 thanks Disney Research for sponsoring wifi access for AAAI-18 registrants in meeting areas. To access the internet in the meeting space area, please select Hilton Meetings, and enter the following password: DisneyAAAI18. AAAI-18

attendees staying at the Hilton Riverside New Orleans will also enjoy complimentary wifi access in their sleeping rooms.

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.

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 will be available after the conference in electronic format only via the AAAI Digital Library. Preliminary PDFs of all papers are available via the online AAAI-18 schedule (Guidebook). For more information, please inquire at the registration desk.

Volunteer Station

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.

New Orleans Convention and Visitors Bureau

The New Orleans Convention and Visitors Bureau is located at 2020 St. Charles Avenue. For more information, including restaurant suggestions and information about Mardi Gras, please see www.neworleans.com

Mardi Gras

Carnival season officially begins on January 6 or Twelfth Night. Most parades don't start until a few weeks before Mardi Gras Day, which can fall as early as February 5 or as late as March 9. In 2018, Mardi Gras falls on February 13, the day before Valentine's Day. Schedules and additional information can be found at www.neworleans.com. For further tips about Mardi Gras parade etiquette, public drinking and the NOLA police, please see www.mardigrasneworleans.com/mardi1.html

Hotel Parking

Hotel overnight parking is $44.00/night, plus tax for self-parking, $49.00/night for valet. There are several additional garages nearby, including one on Tchoupitoulas Street between Poydras and Lafayette and one on Canal Street behind Harrah's Casino. *Driving is strongly discouraged as many streets near the Hilton will be closed off during Mardi Gras parades.

Hotel Restaurants

Le Croissant: Serves breakfast daily, 6:30 AM – 11:00 AM, Monday – Friday and 6:30 AM – 12 PM, Saturday – Sunday

River Blends Café: Quick service eatery, 6:00 AM – 7:00 PM

Marketplace: Grab and go market serving breakfast, lunch and dinner daily, 6:00 AM – 11:00 PM

Drago's Seafood: Walk in Restaurant serving lunch and dinner, 11:00 AM to 10:00 PM

Public Belt: Piano bar serving cocktails and small bites, 4:00 PM – 2:00 AM.

Spirits: Lounge featuring New Orleans style samplings and spirits, 11:00 AM – 2:00 AM

In Room Dining: 6:00 AM – 12:00 AM

Coffee Shops

AAAI-18 will serve coffee at the mid-morning and afternoon breaks. For early morning coffee, please visit Marketplace in the Riverside Complex, or River Blends Café on the second floor near the Bell Desk. The following locations are a 5 – 10 minute walk from the hotel:

Café Du Monde: 500 Port of New Orleans

Revelator Coffee Company: 637 Tchoupitoulas Street

Groceries

Nesbit's Market is located in Unit 1 at 333 Julia Street.

Pharmacy

CVS Pharmacy is located at 800 Canal Street.

Saturday, February 3

9:00 - 9:10 AM	**EAAI-18 Welcome (Eric Eaton and Michael Wollowski)**	Jefferson Ballroom
9:10 - 10:00 AM	**EAAI-18 Invited Talk (Ashok Goel)**	Jefferson Ballroom
10:00 - 10:20 AM	EAAI-18 Main Track	Jefferson Ballroom
10:20 - 10:30 AM	EAAI-18 Announcement (Todd Neller)	Jefferson Ballroom
11:00 AM - 12:00 PM	EAAI-18 Thematic Area: Teaching Neural Networks	
1:30 - 2:30 PM	EAAI-18 Special Track: Model AI Assignments	Jefferson Ballroom
2:30 - 3:30 PM	EAAI-18 Special Track: AI for Education I	Jefferson Ballroom
4:00 - 4:30 PM	EAAI-18 Special Track: Best Practices	Jefferson Ballroom
4:30 - 4:50 PM	EAAI-18 Announcements	Jefferson Ballroom
5:00 - 5:30 PM	EAAI-18 New and Future AI Educator Briefs	Jefferson Ballroom
6:00 - 7:30 PM	**AAAI-18 Opening Reception**	St. Charles Ballroom

Hilton Floor Plan
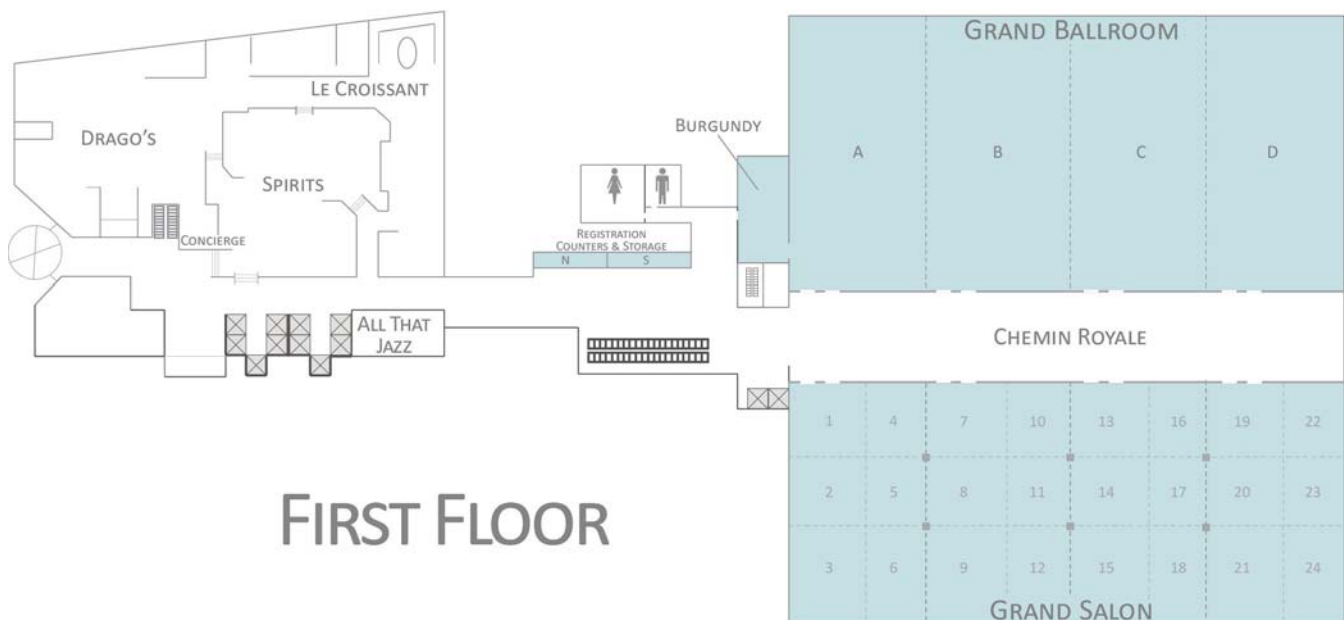
AAAI/IAAI Technical Sessions

(Sunday – Wednesday)
Included on the next four pages is an overview of the AAAI and IAAI Technical Sessions. Please consult (add Guidebook link and PDF link here) for full paper listings.

Coffee breaks will be available each day at 11:00 AM and 3:30 PM in The Chemin Royale, 1st floor and outside the meeting space on the 3rd floor of the hotel. The lunch break will be from 12:30 – 2:00 PM each day. The conference concludes at 12:30 PM on Wednesday, February 7.

Sunday, February 4

Time	Session	Location
8:30 - 8:55 AM	**AAAI: Welcome and Opening Remarks, AAAI Organizational Awards/Honors**	Grand Ballroom B/C/D
9:00 - 9:50 AM	**AAAI 2018 Presidential Address: Subbarao Kambhampati**	Grand Ballroom B/C/D
10:00 - 11:00 AM	AAAI-18 Session: Planning and Scheduling (PS) (HSO)	St. James
	AAAI-18 Session: Game Theory and Economics (GTEP)	Fulton
	AAAI-18 Session: Cognitive Systems (CS) (CM)	Magazine
	AAAI-18 Session: Computational Sustainability (CSAI) (MLA) (ML)	Commerce
	AAAI-18 Session: Vision (VIS) (MLA)	Canal
	AAAI-18 Session: Language and Learning (NLPML) (NLPTM) (KRR) (NLPKR)	Royal
	AAAI-18 Session: Policy Learning (ML) (PS) (RU)	Camp
	IAAI-18 Session: Imagery in Action	Jackson
	EAAI-18 Thematic Area: Teaching Ethics	Jefferson
11:30 AM - 12:30 PM	AAAI-18 Session: Knowledge Representation and Reasoning (KRR)	St. James
	AAAI-18 Session: Language and Learning (NLPTM) (NLPML) (NLPKR)	Fulton
	AAAI-18 Session: Classic Paper Award Presentation: Natasha Noy (11:30-12:00)	Newberry / Ascot
	AAAI-18 Session: Cognitive Systems (CS) (VIS) (MLA) (ML) (CM)	Magazine
	AAAI-18 Session: Computational Sustainability (CSAI) (APP) (GTEP) (HCC) (ML) (PS)	Commerce
	AAAI-18 Session: Vision and Video Retrieval (VIS) (ML) (APP)	Canal
	AAAI-18 Session: Machine Learning Applications (MLA) (APP)	Royal
	AAAI-18 Session: Reinforcement Learning (ML) (PS) (RU)	Camp
	IAAI-18 Session: Focus on and Support of the Customer	Jackson
	EAAI-18 Special Track: AI for Education II	Jefferson
2:00 - 3:30 PM	AAAI-18 Session: Search and Constraint Satisfaction (SCS) (HSO)	St. James
	AAAI-18 Session: Game Theory and Economic Paradigms (GTEP) (MAS)	Fulton
	AAAI-18 Session: Vision (VIS)	Newberry / Ascot
	AAAI-18 Session: Cognitive Systems (CS) (ML) (AIW) (HAC) (MLA) (NLPKR) (NLPML) (VIS)	Magazine
	AAAI-18 Session: Computational Sustainability (CSAI) (ML) (PS) (APP) (GTEP)	Commerce
	AAAI-18 Session: Machine Learning (ML) (GTEP) (MLA) (NLPML)	Canal
	AAAI-18 Session: Language and Learning (NLPML) (NLPTM)	Royal
	AAAI-18 Session: What's Hot Talks: What's Hot in ICAPS, SoCS, SAT, CP, IJCAI, and AAMAS	Camp
	IAAI-18 Session: The Business of Time, Money, and Wine	Jackson
2:00 - 2:50 PM	EAAI-18 Special Outstanding Educator Award Talk (Todd Neller)	Jefferson
2:50 - 3:30 PM	EAAI-18 Panel Discussion: Next Big Steps in AI for Education	Jefferson
4:00 - 5:00 PM	AAAI-18 Session: Knowledge Representation (KRR)	St. James
	AAAI-18 Session: Game Theory and Economic Paradigms (GTEP)	Fulton
	AAAI-18 Session: Vision and Video Analysis (VIS) (MLA)	Newberry / Ascot
	AAAI-18 Session: Cognitive Systems (CS) (ML) (NLPTM) (VIS)	Magazine
	AAAI-18 Session: Computational Sustainability (CSAI) (ML) (ROB) (VIS)	Commerce
	AAAI-18 Session: Vision and Learning (VIS) (ML) (MLA)	Canal
	AAAI-18 Session: Machine Learning and Graphical Models (ML) (RU) (NLPML) (NLPKR) (NLPTM)	Royal
	AAAI-18 Session: Reinforcement Learning (ML) (PS) (ROB)	Camp
	IAAI-18 Engelmore Award Lecture: Stephen Smith	Grand Ballroom B/C/D
4:00 - 4:30 PM	EAAI-18 Panel Discussion: Non-traditional Research Experiences for Undergraduates	Jefferson
4:30 - 5:30 PM	EAAI-18 K-12 Outreach (Sheila Tejada and David Touretzky)	Jefferson
5:10 - 6:10 PM	**AAAI-18 Invited Talk: Yejin Choi**	Grand Ballroom B/C/D
6:30 - 8:30 PM	AAAI-18 Poster / Demo Session 1	Grand Salon C/D
7:00 - 10:00 PM	AAAI Fellows Dinner	Compass (Riverside)

Monday, February 5

7:30 - 8:45 AM	AAAI-18 Women's Mentoring Breakfast	
8:50 - 9:50 AM	**AAAI-18 Invited Talk: Charles Isbell**	Grand Ballroom B/C/D
10:00 - 11:00 AM	AAAI-18 Emerging Track: HAIC Invited Talks (Ross Knepper and Kobi Gal)	Grand Ballroom A
	AAAI-18 Session: Machine Learning (ML)	St. James
	AAAI-18 Session: Game Theory and Economic Paradigms (GTEP)	Fulton
	AAAI-18 Session: Vision and Object Detection (VIS) (MLA)	Newberry / Ascot
	AAAI-18 Session: Natural Language Processing (NLPML) (NLPTM) (NLPKR) (KRR)	Magazine
	AAAI-18 Session: Planning and Scheduling (PS) (HSO)	Commerce
	AAAI-18 Session: Security, Trust and Privacy (APP) (ML) (HAC) (NLPML) (HAI) (MLA)	Canal
	AAAI-18 Session: Reinforcement Learning, Language and Vision (ML) (VIS) (PS) (NLPML)	Royal
	AAAI-18 Session: Deep Learning (ML) (MLA) (NLPML) (VIS)	Camp
	AAAI-18 Session: Machine Learning and Graphical Models (ML) (RU) (KRR)	Grand Salon A-3
	AAAI-18 Student Abstract Spotlight Talks	Grand Salon B-7
	AAAI-18 Panel: Government Funding	Grand Salon B-9
	IAAI-18 Invited Talk: Boris Babenko	Jackson
11:30 AM - 12:30 PM	AAAI-18 Emerging Track: Human-AI Collaboration (HAC) (HCC) (CSAI) (GTEP) (HAI)	Grand Ballroom A
	AAAI-18 Session: Machine Learning (ML)	St. James
	AAAI-18 Session: Game Theory and Economic Paradigms (GTEP) (HCC)	Fulton
	AAAI-18 Session: Vision (VIS) (AIW) (HAI)	Newberry / Ascot
	AAAI-18 Session: Learning Theory (ML)	Magazine
	AAAI-18 Session: Knowledge Representation (KRR) (HSO) (MAS)	Commerce
	AAAI-18 Session: Machine Learning Applications and Recommender Systems (MLA) (ML) (AIW)	Canal
	AAAI-18 Session: Relational and Graph-Based Learning (RU) (ML)	Royal
	AAAI-18 Session: Machine Translation (NLPML) (AIW) (NLPKR)	Camp
	AAAI-18 Session: Applications: From Art and Music, to Education and Medicine (APP) (MLA) (NLPML) (NLPTM)	Grand Salon A-3
	AAAI-18 Senior Member Track: Summary Papers	Port/Starboard (Riverside)
	AAAI-18 Panel: AI Index	Grand Salon B-9
	AAAI-18 Press Conference	Grand Salon B-7
	IAAI-18 Session: Analyzing Software and Networks	Jackson
2:00 - 3:30 PM	AAAI-18 Emerging Track: Human-AI Collaboration (HAC) (NLPML) (NLPKR) (APP) (ML)	Grand Ballroom A
	AAAI-18 Session: Reinforcement Learning (ML)(PS)	St. James
	AAAI-18 Session: Game Theory and Economic Paradigms (GTEP)	Fulton
	AAAI-18 Session: Vision and Perception (VIS) (HAI) (ML)	Newberry / Ascot
	AAAI-18 Session: Language and Learning (NLPML) (NLPKR) (NLPTM)	Magazine
	AAAI-18 Session: Planning and Scheduling (PS) (HSO) (GPIE) (MAS) (APP) (SCS)	Commerce
	AAAI-18 Session: Machine Learning (ML)	Canal
	AAAI-18 Session: AI and the Web (AIW) (MLA) (NLPTM)	Royal
	AAAI-18 Session: Deep Learning and Bayesian Methods (ML) (NLPML) (AIW)	Camp
	AAAI-18 Session: Search and Machine Learning (ML) (HSO) (SCS)	Grand Salon A-3
	AAAI-18 Session: Learning and Stochastic Processes (ML) (MLA) (APP) (RU)	Grand Salon B-9
	AAAI-18 Senior Member Track: Blue Sky Papers	Port/Starboard (Riverside)
	IAAI-18 Invited Session: Supporting Government Services	Jackson
4:00 - 5:00 PM	AAAI-18 Emerging Track: HAIC Invited Talks (Matt Taylor and Devi Parikh)	Grand Ballroom A
	AAAI-18 Session: Deep Learning and Reinforcement Learning (ML)	St. James
	AAAI-18 Session: Multiagent Systems (MAS) (GTEP)	Fulton
	AAAI-18 Session: Vision (VIS) (MLA) (ML)	Newberry / Ascot
	AAAI-18 Session: Deep Learning (ML)	Magazine
	AAAI-18 Session: Heuristic Search (HSO) (ML) (PS)	Commerce
	AAAI-18 Session: Uncertainty in AI (RU) (ML)	Canal
	AAAI-18 Session: Machine Learning Methods and Applications (ML) (MLA) (APP) (HAI) (NLPML) (VIS)	Royal
	AAAI-18 Session: Robotics (ROB) (HAC) (NLPML) (VIS)	Camp
	AAAI-18 Session: Unsupervised and Online Learning (ML)	Grand Salon A-3
	IAAI-18 Invited Session: Utilities and Transportation	Jackson
4:00 - 6:00 PM	AAAI/ACM SIGAI AI Job Fair	Jefferson
5:10 - 6:10 PM	**AAAI-18 / IAAI-18 Joint Invited Talk: Zoubin Ghahramani**	Grand Ballroom B/C/D
6:30 - 8:30 PM	AAAI-18 Poster / Demo Session 2	Grand Salon C/D

Tuesday, February 6

8:30 - 8:50 AM	**AAAI-18 Conference Awards (Sheila McIlraith and Kilian Weinberger)**	Grand Ballroom B/C/D
8:50 - 9:50 AM	**AAAI-18 Invited Talk: Cynthia Dwork**	Grand Ballroom B/C/D
10:00 - 11:00 AM	AAAI-18 Session: Transfer, Adaptation, Multitask Learning (ML) (AIW) (NLPTM) (VIS)	Jefferson
	AAAI-18 Session: Reinforcement Learning and Policy Learning (ML) (PS) (HAC) (ROB)	St. James
	AAAI-18 Session: Game Theory and Economic Paradigms (GTEP) (MAS) (MLA)	Fulton
	AAAI-18 Session: Language, Learning and Representation (NLPML) (NLPKR) (NLPTM)	Newberry / Ascot
	AAAI-18 Session: Reasoning under Uncertainty (RU) (AIW) (ML)	Magazine
	AAAI-18 Session: Activity Recognition, Learning, and Applications (PS)(ML) (APP) (CM) (HAI) (HSO) (MAS) (MLA) (VIS)	Commerce
	AAAI-18 Session: AI and the Web (AIW) (VIS) (HCC) (ML) (NLPML)	Canal
	AAAI-18 Session: Applications and the Web (AIW) (APP) (ML) (MLA) (MAS)	Royal
	AAAI-18 Session: Human-AI Collaboration (HAC) (ML) (MLA) (HAI) (HCC) (PS)	Camp
	IAAI-18 Invited Session: Science!	Jackson
11:30 AM - 12:30 PM	AAAI-18 Session: Machine Learning and Deep Learning (ML) (VIS) (MLA)	Jefferson
	AAAI-18 Session: Deep Learning (ML) (NLPML)	St. James
	AAAI-18 Session: Multiagent Systems and Social Computing (MAS) (GTEP) (HCC)	Fulton
	AAAI-18 Session: Language, Learning and Representation (NLPKR) (NLPML) (NLPTM) (MLA)	Newberry / Ascot
	AAAI-18 Session: Learning, Uncertainty, and Kernels (RU) (ML) (KRR)	Magazine
	AAAI-18 Session: Planning, Learning and Search (PS) (SCS) (ML) (HSO) (MLA)	Commerce
	AAAI-18 Session: Social Networks (AIW) (MLA) (APP)	Canal
	AAAI-18 Session: Language and Learning (NLPML) (CM) (HCC) (ML) (ROB)	Royal
	AAAI-18 Session: Machine Learning Applications (MLA) (VIS) (GPIE)	Camp
	IAAI-18 Invited Session: Improving Communication	Jackson
2:00 - 3:30 PM	AAAI-18 Session: Machine Learning and Deep Learning (ML) (VIS) (APP) (AIW) (HCC)	Jefferson
	AAAI-18 Session: Vision (VIS) (MLA)	St. James
	AAAI-18 Session: Multiagent Systems (MAS) (GTEP)	Fulton
	AAAI-18 Session: Language and Learning (NLPML) (NLPTM) (NLPKR) (AIW) (KRR)	Newberry / Ascot
	AAAI-18 Session: Humans and AI (HAI) (VIS) (APP) (HAC) (HCC) (KRR) (ML) (MLA) (NLPML) (NLPTM)	Magazine
	AAAI-18 Session: Knowledge Representation (KRR) (ML) (PS) (RU)	Commerce
	AAAI-18 Session: Language, Learning and Representation (NLPML) (NLPKR) (NLPTM) (AIW)	Canal
	AAAI-18 Session: Game Theory, Economics, and Machine Learning (GTEP) (ML) (AIW) (APP) (CS) (MLA) (VIS)	Royal
	AAAI-18 Session: Machine Learning and Graphs (ML) (MLA) (NLPML) (NLPTM)	Camp
	IAAI-18 Invited Session: Entertainment and Story	Jackson
4:00 - 5:00 PM	**AAAI-18 Invited Talk: Joe Halpern**	Grand Ballroom B/C/D
5:10 - 6:10 PM	**AAAI Community Meeting (Subbarao Kambhampati)**	Grand Ballroom B/C/D
6:30 - 8:30 PM	**AAAI-18 Poster / Demo Session 3**	Grand Salon C/D
8:00 - 10:00 PM	**AAAI-18 Games Night**	Jefferson

Talk Lengths

AAAI Talks = 15 minutes

AAAI Spotlight Talks = 2 minutes

Senior Member Blue Sky Talks = 15 minutes

Senior Member Summary Talks = 15 minutes

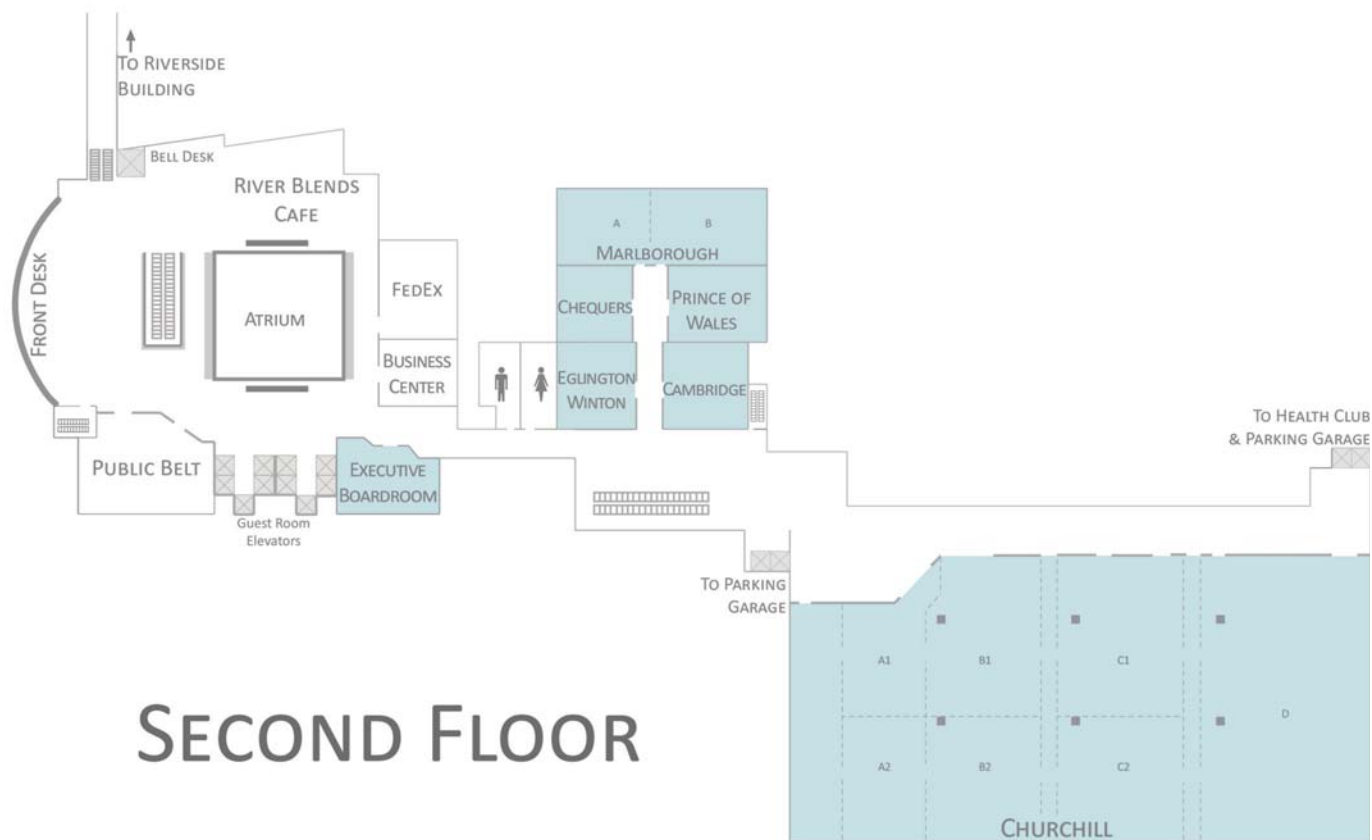What's Hot Talks = 15 minutes

IAAI Deployed Talks = 20 minutes

IAAI Emerging Talks = 15 minutes

IAAI Challenge Talk = 10 minutes

Wednesday, February 7

8:50 - 9:50 AM	**AAAI-18 Invited Talk: Percy Liang**	Grand Ballroom C/D
10:00 - 11:00 AM	AAAI-18 Session: Deep Learning (ML) (VIS)	St. James
	AAAI-18 Session: Machine Learning (ML)	Fulton
	AAAI-18 Session: Multiagent Systems (MAS) (PS)	Newberry / Ascot
	AAAI-18 Session: Search, Constraint Satisfaction, and Optimization (SCS) (HSO)	Magazine
	AAAI-18 Session: Game Theory and Human Interaction (HAI) (AIW) (GTEP) (HAC)	Commerce
	AAAI-18 Session: Language and Learning (NLPML)	Canal
	AAAI-18 Session: Machine Learning Applications (MLA) (APP) (ML)	Royal
	AAAI-18 Session: Machine Learning and Spectral Learning (ML) (AIW)	Camp
	AAAI-18 Session: NLP and Text Mining (NLPTM) (AIW)	Jackson
11:30 AM - 12:30 PM	AAAI-18 Session: Machine Learning, Preferences, and Ranking (ML)	St. James
	AAAI-18 Session: Machine Learning (ML)	Fulton
	AAAI-18 Session: Vision and Deep Learning (VIS) (NLPML)	Newberry / Ascot
	AAAI-18 Session: Knowledge Representation (KRR)	Magazine
	AAAI-18 Session: Machine Learning and Time Series (ML) (MLA) (NLPML)	Commerce
	AAAI-18 Session: NLP and Machine Learning (NLPML) (ML) (NLPKR)	Canal
	AAAI-18 Session: Machine Learning Applications (MLA) (NLPTM) (AIW) (VIS)	Royal
	AAAI-18 Session: Machine Learning (ML) (APP) (HAI)	Camp
	AAAI-18 Session: NLP and Text Mining (NLPTM) (NLPML) (NLPKR)	Jackson

Hilton Floor Plan

SECOND FLOOR

Hilton Floor Plan

THIRD FLOOR

Map labels: To Riverside Building, Breezeway, Windsor, Pool, Commerce, Canal, Camp, Event Services, Atrium, Ascot, Royal, Magazine, Jackson, Fulton, Newberry, N, S, Registration Counters, Sales, Events, & Catering, Trafalgar, Norwich, Durham, Warwick, Parish, The District, St. James Ballroom, To Parking Garage, Jefferson Ballroom, St. Charles Ballroom
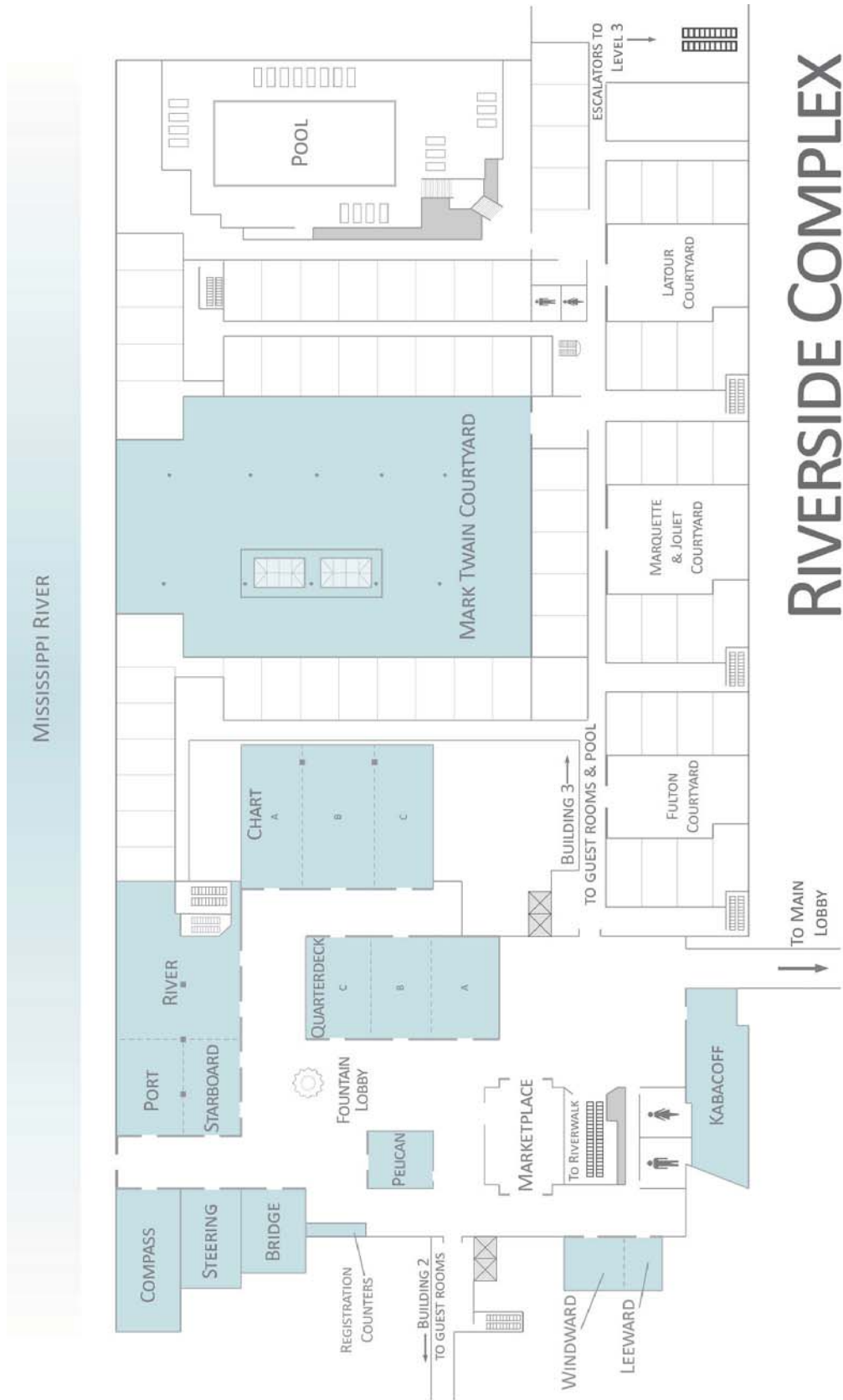
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Hilton Floor Plan

RIVERSIDE COMPLEX

Mississippi River

Pool

Escalators to Level 3

Latour Courtyard

Mark Twain Courtyard

Marquette & Joliet Courtyard

Chart
A
B
C

Building 3 →
To Guest Rooms & Pool

Fulton Courtyard

To Main Lobby

River

Quarterdeck
C
B
A

Port
Starboard

Fountain Lobby

Kabacoff

Compass

Steering

Bridge

Pelican

Marketplace
To Riverwalk

Registration Counters

Building 2 →
To Guest Rooms

Windward

Leeward

AAAI-19 / IAAI-19

Waikiki Beach,
Hilton Hawaiian Village
Honolulu, Hawaii, USA

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Aloha!