

Fall News from the Association for the Advancement of Artificial Intelligence

## AAAI@40 Blue Ribbon Panel

Earlier this year, several AAAI Fellows, Executive Council Committee chairs, and 2019 Spring Symposium Series organizers gathered to discuss a host of current issues and challenges facing AAAI and the AI community, and to think about priorities for AAAI in the near future. Topics covered included education, membership, international outreach, publications, and government and policy issues. The panel formulated nine recommendations for AAAI. They included (1) forming a communications committee to study ways to increase AAAI's outreach to the public, media, and society; (2) launching a webinar series and and associated distinguished speaker series; (3) establishing a new advisory committee, comprising current Fellows, to harness the expertise of this group; (4) establishing discussion mailing lists for subgroups of members, such as undergraduates or graduate students; (5) establishing a fund to award small grants to members for special projects and meetings, especially members in developing countries; (6) working with CRA to set up US-focused AI events or groups; (7) developing programs to attract the industry research community to AAAI, such as tutorials or webinars; (8) examining the current structure of the Innovative Applications of AI conference, and exploring ways to make it more relevant and worthwhile for industry research attendees; and (9) increasing the integration of the Educational Advances in Artificial Intellligence symposium into the main AAAI conference.

Panel members included Yolanda Gil (chair), Bart Selman, Eric Eaton, Gene Freuder, Peter Friedland, Maria Gini, Ashok Goel, Takashi Kido, Sven Koenig, David Leake, Mausam, Steve Minton, Ranjeev Mittu, Prasad Tadepalli, and Shlomo Zilberstein. AAAI would like to thank all the panel members for their generous donations of time, energy, and expertise to the panel.

## Artificial Intelligence Roadmap

In fall 2018, the Computing Community Consortium (CCC) initiated an effort to create a 20-Year Roadmap for Artificial Intelligence, led by Yolanda Gil (University of Southern California and president of AAAI) and Bart Selman (Cornell University and president-elect of AAAI). The goal of the initiative was to identify challenges, opportunities, and pitfalls in the AI landscape, and to create a compelling report to inform future decisions, policies, and investments in this area.

The Roadmap was based on broad community input gathered via a number of forums and communication channels: three topical workshops during the fall and winter of 2018-2019, a Town Hall at the annual meeting of the AAAI, and feedback from other groups of stakeholders in industry, government, academia, and the agencies. A draft of the Roadmap was made available on 13 May 2019 for comment by the computing research community. Following the comment period and further revision, the final version was released on August 6, 2019. Full details are available on the CRA website (cra.

org/ccc/visioning/visioning-activities/ 2018-activities/artificial-intelligenceroadmap/#roadmapdoc).

## AAAI and ACM to Cosponsor Third Conference on AI, Ethics, and Society

AAAI is pleased to announce the continuation of its collaboration with ACM in cosponsoring the AAAI/ACM Conference on Artificial Intelligence, Ethics, and Society (AIES). As AI is becoming more pervasive in our lives, its impact on society is becoming more significant and concerns and issues are arising 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 in various disciplines, such as ethics, philosophy, economics, sociology, psychology, law, history, and politics. This conference is designed to address these issues in a scientific context.

The 2020 AIES conference will be colocated with AAAI-20 from February 7–8, 2020 in New York, NY, USA. The program of the conference will include peer-reviewed paper presentations, invited talks, panels, and working sessions. Papers submitted to the conference should address questions related to any of the above topics with a rigorous scientific approach. We expect papers submitted by researchers of all the disciplines involved. For complete information and the full Call for Papers, please see www.aies-conference.com.



Photo: Jason Dorfman/MIT CSAIL

## In Memoriam, Patrick Winston

It is with great sadness that we report the passing of Patrick Winston, AAAI Fellow and Past President. Winston died July 19, 2019 at Massachusetts General Hospital in Boston. A professor at the Massachusetts Institute of Technology for almost 50 years, Winston was director of MIT's Artificial Intelligence Laboratory from 1972 to 1997 before it merged with the Laboratory for Computer Science to become MIT's Computer Science and Artificial Intelligence Laboratory (CSAIL). Winston led CSAIL's Genesis Group, which focused on developing AI systems that have human-like intelligence, including the ability to tell, perceive, and comprehend stories. He believed that such work could help illuminate aspects of human intelligence that scientists don't yet understand. Outside of the lab he also cofounded Ascent Technology, which produces scheduling and workforce management applications for major airports. Most of all, however, Winston's favorite activity was teaching, for which he was honored with the Baker Award, the Eta Kappa Nu Teaching Award, and the Graduate Student Council Teaching Award.

Patrick Winston served as president of AAAI from 1985–1987.

## Join Us in New York for AAAI-20, IAAI-20, EAAI-20!

The Thirty-Fourth AAAI Conference on Artificial Intelligence (AAAI-20), the Thirty-Second Conference on Innovative Applications of Artificial Intelligence (IAAI-20), and the Tenth Symposium on Educational Advances in Artificial Intelligence (EAAI-20) will be held February 7–12 at the Hilton New York Midtown in New York.

## Initiative for Diversity and Inclusion

Participation in AI by groups that are underrepresented in computer science is a fraction of what is needed to have an AI workforce that reflects the diversity in society. Diversity has many facets, including races, ethnicities, genders, ages, religions, disabilities, sexual orientations, socioeconomic status, and cultural background. AAAI-20 will continue AAAI's initiative to offer activities that help to broaden participation in the AI field, including lunches for specific groups, to panels and workshops, and more. Proposed activities will be listed later this fall at aaai.org/Conferences/AAAI-20/aaai-20-diversity-inclusion.

## AI in Practice Returns to AAAI-20

AAAI-20 will feature the second iteration of the AI in Practice program on Wednesday, February 12. The 2020 AI in Practice program will focus on emerging applications of AI in healthcare. The program aims to offer a venue for exchanging ideas among participants from different disciplines, from general computer science, to AI and ethics, to medicine and public health. The event program will include keynotes, invited talks, and a discussion panel. Featured speakers will include Vivian Lee (Verily Life Sciences): Anesh Chopra (CareJourney and former first CTO of the United States); Isaac Kohane (Harvard Medical School); John Brownstein (Boston Children's Hospital); and Leo Celi (Massachusetts Institute of Technology). For complete program information, aaai.org/Conferences/AAAI-20/ ai-in-practice.



AAAI is pleased to announce the winners of the recent AAAI Special Awards at the Intel International Science and Engineering Fair, held May 12-17, 2019 in Phoenix, Arizona. The \$1,500 first prize was awarded to Kevin Meng (Plano, Texas, USA) for Looking through Walls with Artificial Intelligence: An Innovative Solution for Real-Time Retrieval of the Human Figure behind Visual Obstruction. The \$1,000 second prize was presented to Pranav Senthilvel and Shreshth Srivastava (Prospect, Kentucky, USA) for The Development of a Holistic System for Broad-Spectrum Crop Disease Diagnosis and Treatment. Anish Singhani (San Ramon, California, USA) was awarded the \$500 third prize for Real-Time Freespace Segmentation Using Deep Learning on Autonomous Robots for Detection of Negative Obstacles. Finally, honorable mentions were presented to Rhythm Garg (Frisco, Texas, USA) for Diagnosing Autism with Machine Learning: Binary Classification for Eye Movement in Virtual Reality Environment; Yufeng Sun (Beijing, China) for It's Break Time: An Iris-Based Eye Fatigue Monitor; Gabrielle Kaili-May Liu (Nashville, Tennessee, USA) for Weight Friction: A Simple Method to Overcome Catastrophic Forgetting and Enable Continual Learning in Neural Networks; Dongyeong Kim (Gyeonggi-do, South Korea), Hyogi Kim (Seoul, South Korea), and Minseo Eun (Jeollanam-do, South Korea) for Design of Analytic Application for Music Therapy Focused on Function between EEG

and Sound Using Machine Learning Approaches; and Neil Deshmukh (Bethlehem, Pennsylvania, USA) for An Adaptive, Low-Cost Device for Automated and Offline Medical Analysis Utilizing Neural Networks with Reinforcement Learning Optimization.

AAAI thanks Joohyung Lee (Head Judge), Yu "Tony" Zhang, and Siddharth Srivastava, all from Arizona State University, who served as AAAI's judges at the event, for their generous donation of time and effort.

The Intel International Science and Engineering Fair, a program of Society for Science and the Public, is the world's largest pre-college science competition, and includes more than 1,800 high school students from more than 75 countries, regions and territories. Society for Science and the Public, a nonprofit organization dedicated to public engagement in scientific research and education, owns and has administered the International Science and Engineering Fair since its inception in 1950. In 1958, the competition became international for the first time when Japan, Canada and Germany joined.

The Intel International Science and Engineering Fair 2019 was funded jointly by Intel and the Intel Foundation with additional awards and support from dozens of corporate, academic, governmental and science-focused organizations. To learn more about Society for Science and the Public, visit www. societyforscience.org.

# Upcoming Deadlines for the 2020 Conferences

Please note these upcoming deadlines:

## AAAI-20 Student Abstract and Poster Program (September 20)

The goal of this program is to provide 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 program is open to all students at the Undergraduate, Masters, and Doctoral levels. Abstracts are due September 20. See aaai. org/Conferences/AAAI-20/studentabstract-call for details.

## AAAI-20 Demonstrations Program (September 20)

The AAAI-20 Demonstrations Program is intended to foster discussion and exchange of ideas among researchers and practitioners from academe and industry by presenting software and hardware systems and research prototypes of such systems, including their capabilities and workings. Accepted demonstrations will be allocated one time slot during one of the main conference evening poster programs, and will have a short paper included in the proceedings. Submissions from everyone, including authors of paper submissions to AAAI, IAAI, and AAAI-20 workshops, are encouraged. Short papers and video or slides are due September 20.

## AAAI-20 Workshop Program (November 15)

The workshop program includes the following 23 workshops covering a wide range of topics in artificial intelligence.

Affective Content Analysis: Interactive Affective Response

Artificial Intelligence for Cyber Security

Artificial Intelligence for Education

Artificial Intelligence in Team Sports

Artificial Intelligence of Things

Artificial Intelligence Safety

Cloud Intelligence: AI/ML for Efficient and Manageable Cloud Services

Deep Learning on Graphs: Methodologies and Applications The Eighth Dialog System Technology Challenge

Engineering Dependable and Secure Machine Learning Systems

Evaluating Evaluation of AI Systems / Evaluating Reinforcement Learning Agents

Generalization in Planning

Health Intelligence

Intelligent Process Automation — RPA Meets AI

Interactive and Conversational Recommendation Systems

Knowledge Extraction from Unstructured Data in Financial Services

Plan, Activity, and Intent Recognition

Privacy-Preserving Artificial Intelligence

Reasoning and Learning for Human-Machine Dialogues

Reasoning for Complex Question Answering

Reinforcement Learning in Games

Reproducibility in AI — Future Direction and Reproducibility Challenge

Statistical Relational AI

The AAAI-20 Workshop Call for Participation is now available at aaai.org/Conferences/AAAI-20/ws20/. The recommended date for workshop submissions is November 15, unless otherwise noted at the individual workshop websites. Submission requirements vary for each workshop. Please consult the individual workshop description for complete information about where to submit your paper and a link to the workshop supplementary website, where more detailed information will be available.

## Be an AAAI Sponsor, Exhibitor, and Job Fair Participant!

AAAI invites you to participate as a sponsor, exhibitor, and job fair employer at AAAI-20. Your participation will give you instant visibility to this diverse group of AI professionals, representing a host of research areas such as search, planning, knowledge representation, reasoning, natural language processing, robotics and perception, multiagent systems, statistical learning, and deep learning, as well as applications in diverse domains such as healthcare, sustainability, transportation, and commerce. In 2020, AAAI will highlight research in the emerging area of artificial intelligence for social impact. Sponsors and exhibitors enjoy a host of benefits, including complimentary technical registrations. The AAAI/ACM SIGAI job fair is a place for students and professionals looking for internships or jobs to meet with representatives from companies and academia in an informal meet-and-greet atmosphere. Past fairs have attracted over 30 companies and hundreds of interested job seekers!

The preferred deadline for notification of intent to participate is October 15, 2019.

## AAAI-20 Student Scholar and Volunteer Program

AAAI is pleased to announce the continuation of its Student Scholarship Program for 2020, which is cosponsored by AAAI and the AI Journal. The Student Scholar Program provides partial travel support for students who are full-time undergraduate or graduate students at colleges and universities; are members of AAAI; submit papers to the conference program or letters of recommendation from their faculty advisor; and submit scholarship applications to AAAI by November 15, 2019. In addition, repeat scholarship applicants must have fulfilled the volunteer and reporting requirements for previous awards. In the event that scholarship applications exceed available funds, preference will be given to students who have an accepted technical paper, and then to students who are actively participating in the conference in some way. However, all eligible students are encouraged to apply.

The Student Volunteer Program is an essential part of the conference and student participation is a valuable contribution. Volunteers will support AAAI organizers in New York. In 2020, a limited number of complimentary technical program registrations will be available for students who volunteer during the conference. Preference will be given to participating students for the volunteer positions. Local students or students not requiring travel assistance can apply for the Volunteer Program if openings are available. AAAI membership is required for eligibility. The deadline for volunteer applications is November 15, 2019.

For further information about the Scholarship Program or the Volunteer Program, please contact AAAI at scholars20@aaai.org. The application will be available via the AAAI-20 website in late September.

## Please Join Us for AIIDE-19 in Atlanta, Georgia!

The Fifteenth AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment (AIIDE-19) will be held at the at Georgia Tech, October 8-12, 2019. AIIDE is the definitive point of interaction between entertainment software developers interested in AI and academic and industrial AI researchers. Sponsored by AAAI, the conference is targeted at both the research and commercial communities, promoting AI research and practice in the context of interactive digital entertainment systems with an emphasis on commercial computer and video games. This year's conference features a special topic of "Human-Centered Evaluation," and will include speakers, panels, and paper sessions that focus on directly evaluation and critical analysis of AI in digital entertainment contexts.

The program will also include a slate of invited speakers, technical paper presentations, a poster and demo session, a doctoral consortium, and the annual Starcraft AI Competition. The Playable Experiences track will continue this year with four systems with articulable innovation in the use of AI directly affecting the user's experience, including Rime Royale: A Guildmaster Simulator,; Playing with SHRDLU; Human Improvised Theatre Augmented with Artificial Intelligence; and TEDRIC: A Talk Exercise Designer for Realizing Improvisational Comedy. Finally, the main conference program will be preceded by two workshop days on October 8–9.

## AIIDE Workshops and Tutorials AIIDE-19 will include three workshops and two tutorials.

#### Workshops

Experimental AI in Games (W1) will be held October 8-9. For details, see www.exag.org.

Artificial Intelligence for Strategy Games (W2) will be held October 8. For details, see skatgame.net/mburo/ aiide19ws.

Game Analytics (W3) will be held October 9. For details, see sites.google. com/view/gaw19.

#### Tutorials

CamJam: Using the Camelot Virtual Environment (T1) will be held during the afternoon of October 9.

Machine Learning for Games (T2) will be held during the afternoon of October 8.

#### Registration and Hotel

The full conference program and registration information is available at aiide.org. The late registration deadline is September 13. Onsite rates will be in effect after that date. Preregistration is strongly encouraged. The online registration form is available at aaaiconf.cvent.com/ aiide19, and will be open through the conference period. Onsite registration will be held in the foyer of the designated Georgia Tech meeting rooms each day.

AAAI has reserved a block of rooms at the Georgia Tech Hotel and Conference Center at reduced conference rates. When reserving your room, please identify yourself as an AIIDE-19 attendee to receive the discounted rate. Space is very limited so please be sure to reserve well in advance of the cut-off dates. The cut-off date for conference rate reservations is September 16, 2019 (5:00 pm ET). Reservations made after that date are subject to availability.

For more information about registration or hotels in the area, please consult www.aiide.org, or write to aiide19@aaai.org.

## 2019 AAAI Fall Symposium Series

The Association for the Advancement of Artificial Intelligence's 2019 Fall Symposium Series will be held Thursday through Saturday, November 7-9 at the Westin Arlington Gateway, Arlington Virginia, adjacent to Washington, DC. The titles of the eight symposia are as follows:

Artificial Intelligence and Human-Robot Interaction for Service Robots in Human Environments

Artificial Intelligence and Work

Artificial Intelligence for Social Good

Artificial Intelligence for Synthetic Biology

Artificial Intelligence in Government and Public Sector

Cognitive Systems for Anticipatory Thinking

Human-Centered AI: Trustworthiness of AI Models and Data

Teaching AI in K-12

The Fall Symposium Series will feature an informal reception on Thursday, November 7. A general plenary session, in which the highlights of each symposium will be presented, will be held on Friday, November 8. Participation is open to active participants as well as other interested individuals on a first-come, first-served basis. Each participant will be expected to attend a single symposium.

The final deadline for registration is October 11, 2019. For registration information, please contact AAAI at fss19@aaai.org or visit AAAI's web site at www.aaai.org/Symposia/Fall/ fss19.php. A hotel room block has been reserved at the Westin. The cut-off date for reservations is October 16, 2019 at 5:00 pm Eastern Time. Please call +1-888-627-7076 (reference AAAI) for reservations, or reserve a room online via the URL previously listed.

## 2020 AAAI Spring Symposium Series

AAAI is pleased to present the 2020 Spring Symposium Series, to be held Monday – Wednesday, March 23-25, 2020, at Stanford University. The nine symposia will be as follows:

Applied AI in Healthcare: Safety, Community, and the Environment

*Organizers:* Rajan Puri, Samira Rahimi, Selma Šabanovic



## Join Us in New York for AAAI-20 / IAAI-20 / EAAI-20!

The Thirty-Fourth AAAI Conference on Artificial Intelligence (AAAI-20), the Thirty-Second Conference on Innovative Applications of Artificial Intelligence (IAAI-20), and the Tenth Symposium on Educational Advances in Artificial Intelligence (EAAI-20) will be held February 7–12 at the Hilton New York Midtown in New York. Registration information will be available in early November at aaai.org/Conferences/AAAI-20. The cut-off date for hotel reservations is January 6, 2020, but we encourage you to secure your room early. For more information about the AAAI-20 block of rooms at the Hilton New York Midtown, please see aaai.org/Conferences/AAAI-20/ hotel-and-travel.

The conference venue is located in the heart of New York City in Midtown Manhattan, and is within walking distance of New York's premier attractions, such as Times Square, Radio City Music Hall, Fifth Avenue shopping, the Broadway Theatre District, Central Park, and The Museum of Modern Art (MOMA), to name only a few. Beyond Manhattan's many iconic landmarks, New York's five boroughs have five distinct personalities, with their own vibrant cultures, dynamic art scenes and world-renowned shopping and dining. For complete information about options in New York, please visit www.nycgo.com.

For complete details about all of the AAAI-20 programs, please visit aaai. org/Conferences/AAAI-20/ or write to AAAI at aaai20@aaai.org.

## AAAI-20 Organizers

AAAI-20 General Chair

Francesca Rossi (IBM Research, USA / University of Padova, Italy)

AAAI-20 Program Cochairs

Vincent Conitzer (Duke University, USA) and Fei Sha (University of Southern California, USA)

IAAI-20 Conference Chair and Cochair Ruchir Puri (IBM Research, USA) and Neil Yorke-Smith (TU Delft, Netherlands)

## EAAI-20 Symposium Cochairs

Nate Derbinsky (Northeastern University, USA) and Lisa Torrey (St. Lawrence University, USA)

#### AI in Manufacturing

*Organizers:* Mark Maybury, Peter Friedland, Jim Hender, John Manferdelli, Manish Mehta

AI Welcomes Systems Engineering: Towards the Science of Interdependence for Autonomous Human-Machine Teams

*Organizers:* William Lawless, Ranjeev Mittu, Don Sofge, Thomas Shortell, Tom McDermott, Brian Jalaian

Challenges and Opportunities for Multiagent Reinforcement Learning

*Organizers:* Chris Amato, Frans Oliehoek, Karl Tuyls

Combining Artificial Intelligence and Machine Learning with Physical Sciences

*Organizers:* Jonghyun Lee, Eric Darve, Peter Kitanidis, Matthew Farthing, Tyler Hesser

Combining Machine Learning and Knowledge Engineering in Practice

*Organizers:* Andreas Martin, Knut Hinkelmann, Frank Van Harmelen, Doug Lenat, Aurona Gerber, Hans-Georg Fill

Commonsense Redux: Integrating Formal Commonsense Knowledge Acquisition and Reasoning with Deep Learning, Crowdsourcing, and More

*Organizers:* Leora Morgenstern, Yejin Choi, Vered Shwartz, Gary Marcus

Deep Models and Artificial Intelligence for Defense Applications: Potentials, Theories, Practices, Tools and Risks

*Organizers:* Ying Zhao, Doug Lange, Tony Kendall, Erik Blasch

Towards Responsible AI in Surveillance, Media, and Security through Licensing

*Organizers:* Julia Haines, Danish Contractor, Daniel McDuff, Brent Hecht, Christopher Hines

For additional information, and links to the supplementary websites for each symposium, please see www. aaai.org/Symposia/Spring/sss20.php. Submissions for the symposia are due to organizers on November 1, 2019. Notification of acceptance will be given by December 6, 2019. Registration information will be available by December 15, 2019. Please contact AAAI at sss20@aaai.org with any questions.

## AAAI Elects New Executive Councilors

AAAI is pleased to announce and congratulate the new slate of councilors for the AAAI Executive Council.

Incoming Councilors (through 2022) Yiling Chen (Harvard University)

Judy Goldsmith (Kentucky University)

Odest Chadwicke Jenkins (University of Michigan)

Brian Scassellati (Yale University)

In addition to these individuals, eight councilors elected in 2017 and 2018 will continue their terms of service during the coming year. For a complete list, please refer to www.aaai.org/ Organization/officers.php.

AAAI also thanks the four retiring Councilors, for their dedicated service and generous donations of time. The four retiring members are Blai Bonet (Universidad Simón Bolívar, Venezuela), Mausam (Indian Institute of Technology Delhi, India), Michela Milano (Università di Bologna, Italy), and Qiang Yang (Hong Kong University of Science and Technology, Hong Kong).

## 2020 AAAI Award Nominations

The AAAI 2020 Awards Program is now under way, and nominations are solicited for the following awards, to be presented at the 2020 AAAI Conference in New York, NY.

## 2020 AAAI Squirrel AI Award

Plans for the inaugural AAAI Squirrel AI Award are underway, and the first award is expected to be given at AAAI-20. This new international award will recognize significant contributions in the field of artificial intelligence with profound societal impact that have generated otherwise unattainable value for humanity. The award includes a one million dollar prize. For more information about the award and how to make a nomination, please write to award20@aaai.org

## AAAI Fellows Nominations Solicited

The 2020 Fellows Selection Committee is currently accepting nominations for

AAAI Fellow. The AAAI Fellows program is designed to recognize people who have made significant, sustained contributions to the field of artificial intelligence over at least a ten-year period. All regular members in good standing are encouraged to consider nominating a candidate. At least two references must accompany nominations. The nominator or one of the references must be a AAAI Fellow who is a current member of AAAI. For further information about the Fellows Program, please contact AAAI at fellows20@aaai.org. Nomination materials are available on the AAAI web site at www.aaai.org/Awards/fellows.php. The deadline for nominations is September 27, 2019.

## AAAI Senior Member Grade of Membership

AAAI is now taking applications from regular members for the AAAI Senior Member grade of membership. This status is designed to recognize members who have achieved significant accomplishments within the field of Artificial Intelligence. To be eligible for nomination for Senior Member, candidates must be consecutive members of AAAI for at least five years and have been active in the professional arena for at least ten years. Applications should include information that details the candidate's scholarship, leadership, and/or professional service. At least two references, one of which must be written by a AAAI Fellow or a current AAAI Senior Member must accompany the senior member application. References should be submitted by colleagues who know the candidate, and are familiar with their work and accomplishments. Each year a maximum of 25 members will be elected to the Senior status. All applications and references must conform to the requirements listed on the form, and must be received by September 27, 2019. For complete details and the application form, please see www.aaai. org/Awards/senior.php, or contact Carol Hamilton at seniormember20@ aaai.org.

## 2020 AAAI Special Award Nominations

AAAI is pleased to announce the continuation of several special awards in 2020, and is currently seeking nominations for the 2020 AAAI Classic Paper Award, the AAAI Distinguished Service Award, the Robert S. Engelmore Award, and the AAAI/EAAI Outstanding Educator Award. The 2020 AAAI Classic Paper Award will be given to the author of the most influential paper(s) from the Nineteenth National Conference on Artificial Intelligence, held in 2004 in San Jose, California, USA. The 2020 AAAI Distinguished Service Award will recognize one individual for extraordinary service to the AI community. The Robert S. Engelmore Memorial Lecture Award is presented annually to an individual who has shown extraordinary service to AAAI and the AI community. The AAAI/ EAAI Outstanding Educator Award honors a person (or group of people) who has made major contributions to AI education that provide long-lasting benefits to the AI community. Awards will be presented at AAAI-20 in New York. Complete nomination information, including nomination forms, is available at aaai.org/Awards/awards. php. The deadline for nominations is September 27, 2019. For additional inquiries, please contact Carol Hamilton at awards20@aaai.org.

## First Call for Nominations for 2020 Executive Council Election

The 2020 Nominating Committee is seeking nominations from the AAAI membership for the positions of AAAI President-Elect and Executive Councilor. In 2020, AAAI members will elect one individual to serve a two-year term as president-elect, followed by two years as president, and finally, two years as immediate past president. In addition, members will elect four new councilors to serve three-year terms on the AAAI Executive Council. All elected officers and councilors are required to attend all council meetings each year (usually 1-2 in person and 2-3 via telecon), and actively participate in AAAI activities. Nominees must be current members of AAAI. The Nominating Committee encourages all regular AAAI members in good standing to place an individual's name before them for consideration. (Student and institutional members are not eligible

to submit candidates' names.) The Nominating Committee, in turn, will nominate two candidates for presidentelect and eight candidates for councilor in early spring. In addition to members' recommendations, the committee will actively recruit individuals in order to provide a balanced slate of candidates. AAAI regular members will vote in late spring, and the new members of the Executive Council will be installed in the summer of 2020.

To submit a candidate's name for consideration, please send the following information to Carol Hamilton, Executive Director, AAAI, 2275 East Bayshore Road, Suite 160, Palo Alto, CA 94303; by fax to 650/321-4457; or by email to hamilton@aaai.org:

Name

Affiliation

City, State or Province, Country

Email address

URL

Year of membership in AAAI

Approximate number of AAAI publications

At least two sentences describing the candidate and why he or she would be a good candidate

Please include any additional information or recommendations that would be helpful to the Nominating Committee. Nominators should contact candidates prior to submitting their names to verify that they are willing to serve, should they be elected. The deadline for nominations is March 1, 2020.

## AAAI Executive Council Meeting Minutes

The AAAI Executive Council was held January 28, 2019 in Honolulu, Hawaii, USA.

Attending: Yolanda Gil, Bart Selman, Rao Kambhampati, David Smith, Blai Bonet, Cristina Conati, Eric Eaton, Gene Freuder, Ashok Goel, Ayanna Howard, Mausam, Claire Monteleoni, Qiang Yang, David Leake, Peter Stone, Pascal Van Hentenryck, Zhi-Hua Zhou, Tom Dietterich, Dave Touretzky, Christina Gardner-McCune, Cynthia Rudin, Carol Hamilton, Mike Hamilton *Not Attending:* Michela Milano, Ariel Procaccia, Matthijs Spaan

Subbarao Kambhampati, Past President of AAAI, presented the gavel to Yolanda Gil, the current president of AAAI. Although Gil took over in September 2018, this was the first physical meeting of the Executive Council.

Gil called the meeting to order at 8:45 am and thanked everyone for being there. Councilors introduced themselves.

The minutes of the September 25, 2018 meeting were unanimously approved.

## Standing Committee Reports

Awards/Fellows/Nominating

Rao Kambhampati reported on the activities of these committees, noting that there was a very good pool of candidates for Senior Member and Fellow. He brought two issues to the Council from the Committees: First, the current Fellows nomination guidelines require candidates to have been members of AAAI for three consecutive years just prior to their nomination or to be lifetime members. In the latter case, the lifetime membership can commence up to the time of the nomination. The lifetime membership option was instituted to help candidates who have been associated with AAAI over a period of many years, but have not been consistent with keeping up their membership status. Because of the heightened interest in AI, some candidates have become lifetime (and first-time) members in order to qualify for AAAI Fellowship. Those nominations did not typically fare well in the selection process. Given this situation. the Fellows Selection Committee would like to change the language in the guidelines so that candidates will not be eligible until three years after a lifetime membership is initiated. After some discussion, the suggestion was made to keep this option, but to add language specifying a history of engagement with the AI community and AAAI.

Second, the current language also specifies that an unsuccessful nomination will be considered for two additional years. This applies even if the nominator and references make no modifications or additions to the nomination in the two consecutive years. The committee suggested that nominators be required to formally request a review of the unsuccessful nominations for years two and three, if desired. As part of this process, nominations could also be updated during each review year. The default will no longer be an automatic threeyear review, but the maximum number of years that a nomination will be reviewed will remain three. Gene Freuder noted that all nominators would have to be directly notified of this new policy. Yolanda congratulated Council members Cristina Conati and Eric Eaton, who are 2019 senior members.

#### Conference

AAAI-19 Program Cochairs Pascal Van Hentenryck and Zhi-Hua Zhao joined the meeting. The Council thanked them profusely for all their work on the conference. Peter Stone noted the extraordinary effort that the chairs had put in due to the explosion of submitted papers for AAAI-19. The conference received twice as many papers as NeurIPs this year, and had half the amount of time for the review period. Stone reported that he has selected the program chairs for 2020, who are Vincent Conitzer and Fei Sha. A handoff meeting will take place between the 2019 chairs and the 2020 chairs during the conference. The 2021 chairs have not as yet been finalized. He encouraged everyone to send suggestions for possible candidates, with attention to gender and geographical diversity. Stone has also been in touch with past and current conference committee members about a host of issues during the past several months, and the committee planned to hold a physical meeting during the conference. The most significant issues include the reviewing schedule, the structure of the program committee, the summary reject process, the paper withdrawal process, submission area imbalance, the new presentation format decision process, software review system, AIES colocation, the engagement of industry (AI in Practice program), childcare, and larger venues to ease the constraints on acceptances. There will be a post-conference survey, which is being coordinated by Gene Freuder.

Van Hentenryck gave an overview of the AAAI-19 conference, first thanking the dozens of people who made the conference a reality. He reviewed the conference paper awards process, and the new presentation format process. He noted that Sheila McIlraith and Killian Weinberger had provided a tremendous amount of valuable feedback from AAAI-18. He thanked Gil for her efforts in helping the chairs create diversity outreach in the 2019 program committee. The workflow chair played a key role in managing the CMT review process, creating constant statistical reports for the cochairs, area chairs, and SPC. Van Hentenryck and Zhou would recommend that the 2020 chairs consider two workflow chairs to accommodate the tremendous load. Van Hentenryck also thanked the AAAI staff for their support. Van Hentenryck reviewed the invited speaker program, the plans for the debate, and the special track on AI and Social Impact (AISI), which received a large number of submissions (273). For the AISI track, the track cochairs selected a subset of 108 papers for review, and accepted 21 for presentation.

He then gave a brief report on what was new in 2019. Van Hentenryck and Zhou introduced a very conservative summary reject process. SPC members were asked to identify papers for summary reject prior to the PC assignment process. These recommendations were sent to the area chairs (AC). If an AC disagreed with a recommendation, the paper remained in the pool. If the AC approved, the recommendation was forwarded to the Program Cochairs, who could also veto the recommendation and send the paper for review. Another successful innovation was to limit the number of papers that people saw when they were bidding, based on their submitted keywords and research papers — 150 for PC members and 300 for SPC members. Initial feedback had been positive about this process. Obviously, if keywords and papers were not submitted, this system did not work as well. The blind review did not allow the identity of the AC or SPC to be revealed to other members of the program committee, but the AC could see everything. In an effort to identify the most suitable papers for oral presentation, authors were encouraged to submit slides and videos at the time of their camera-ready submission. AC and SPC made recommendations about presentation format based on these submissions. For the most part, authors who took the time to do this extra work were able to give oral presentations. There was a separate process once the session chairs were identified for authors to submit their final slides and receive feedback about them.

The Council discussed the acceptance rate, and agreed that the conference does not need to accept twice the number of papers even though the number of submitted papers doubled. One suggestion to accommodate more papers was to offer publication only with no oral or poster presentation. Some people felt this would discourage attendance and would also be problematic for authors who are required to present in order to attend. Overall, the program chairs were impressed by the overall quality of the submissions. They also emphasized that they thought this year was an anomaly and that there were many factors involved that kept the acceptance rate low. Now that larger numbers can be better anticipated, it is likely that efforts can be made to accommodate larger numbers of accepted papers through expanded program committees, expanded review and discussion schedules, and larger facilities. Carol Hamilton noted that the 2020 venue has considerably more room for posters, but parallel oral sessions will remain somewhat the same. For future years, there will be a shift back to convention centers where larger halls will be available.

Zhou gave an overview of the submission, review, and acceptance statistics for AAAI-19, which he also reviewed extensively in the opening ceremony of the conference. There were 7,745 abstract submissions, with 7,095 full-paper submissions - a 103 percent increase over 2018. A total of 1,147 papers or 16.2 percent were accepted (460 oral at 122 sessions and 687 posters at 3 poster sessions). Over 68 percent of the papers had students as first authors. While the largest increase in submissions was from China, the largest acceptance rates were for papers from Israel, Germany and Canada. Machine learning, natural language processing, and vision had the largest number of submissions, but reasoning under uncertainty, applications, and Humans and AI had the largest increases in submissions from 2018. As a percentage of papers submitted in each area, game theory and economic paradigms, heuristic search, and cognitive systems fared the best. There was a submission limit of 10 papers per author this year, and most authors (12,208) had only one submission. Sixty authors had the limit of 10.

Both Van Hentenryck and Zhou recommended an expanded time for the review process. Because of the varying styles and commitments of the AC, the review process can run late when the AC member does not schedule enough time for discussion before a recommendation is made. They would encourage more room for buffers in the schedule to accommodate these problems. If it is possible to replace a late AC member on specific papers, they recommend that this be done quickly to keep things on track. Stone noted that the time issue is one of the biggest decisions for the conference committee. The options include moving the submission deadline to the summer, making the decision deadline later, moving the conference later in February or March, or expanding only some parts of the process but keeping the general schedule about the same. Van Hentenryck noted that 20 additional days would still make a huge difference in the schedule. Blai Bonet also suggested a two-tiered review process that might speed up the process. All papers would receive a first round of shorter reviews, and then the pool would be narrowed, with the next tier receiving more in-depth reviews. A similar option is to have two initial reviewers, followed by two more in-depth reviews, if warranted. Kambhampati reported that a similar two-tiered system has been tried by other conferences with little success.

Kambhampati encouraged the Council to seek additional space for 2020 should it be necessary based on the program chair recommendations. Van Hentenryck noted that although there was an unusual number of papers submitted, there was no indication that the quality matched the volume. Therefore, the quality was not really known until quite late in the process when it can be difficult to find additional space.

Carol Hamilton reported that registration numbers have increased in line with the increase of papers accepted, more interest in AI, and the very attractive venue. Main conference paid registrations were up by over 800 or almost 50 percent in preregistration over 2018. Gil noted that the number of first-time students at the conference is quite high, based on her experience at the student reception the evening before. In addition, the number of undergraduate students has increased. Kambhampati noted that the drop in AIES registrants may be due to funding because it is a more multidisciplinary conference, and therefore not exclusively computer scientists. Overall, people agreed that Hawaii was not a deterrent to funding or attendance. Gil also inquired about the status of the 2019 cochair or 2020 chair for IAAI. There has been no further information about this, and Carol Hamilton offered to follow up with the current chair to see where things stand.

#### Ethics

Gil thanked Ayanna Howard for agreeing to chair the Ethics Committee. Gil reminded the Council that specific recommendations were made during the last meeting for the pending ethics documents, including the AAAI Code of Professional Ethics and Conduct, the AAAI Code of Conduct for Events and Conferences, and the Conflict of Interest Policy. These recommendations have been executed, including reviews and edits by legal counsel, and approval by ACM for edits to the adapted ACM document. Howard reported that the next step is to vote on the current versions of the documents for adoption by AAAI. Once the Council votes on the revised documents, they will be added to the website and the Council can discuss the best way to alert conference participants to the Code of Conduct for Events and Conferences. Howard briefly reviewed the scope of each document. She also noted that the Ethics Committee will be looking more closely at what the ramifications

and process will be should a report of a bad citizen be received and confirmed. David Smith reported that another document had been included in the discussion at the September 2018 meeting, which outlined in detail an extensive enforcement policy. This document was considered to be too onerous for the small AAAI structure and resources. A more general statement about how infractions will be handled is included in each of the documents. This statement refers to the bylaws of AAAI and was approved by legal counsel as well. Howard noted that the Council should discuss where the Code of Conduct for Events and Conferences should be posted. Should it be on the AAAI website, and websites of all AAAI conferences, but also linked to the conference registration page, with a required acknowledgement of the policy? Should this acknowledgement also be required for the Code of Professional Ethics and Conduct on the conference paper management system (for reviewers and authors), as well as in the membership system for new and renewing members? Cristina Conati suggested that a third document be written that would be more targeted at the reviewer guidelines.

The Council discussed some ambiguities in the Code of Conduct for Events and Conferences, and made some specific recommendations for reordering some language and minor wordsmithing. In addition, a link will be added to the Code of Professional Ethics and Conduct. There was some concern about the display of graphic images in the course of a scientific presentation, and whether these would be considered harassment. Gil noted that the spirit of the document called for authors to present sensitive topics and material in a thoughtful and respectful way, and that there was no intention of barring the presentation of such topics.

Gil asked the committee to vote on the current documents, acknowledging that it is possible that some future modifications may be made based on feedback from the AAAI community. The Council voted on the two documents separately, and approved each unanimously, with recommended revisions to the Code of Conduct for Events and Conferences. The Code of Conduct for Events and Conferences will be linked to the AAAI-19 conference website as soon as possible, and the Code of Professional Ethics and Conduct will be posted on the main AAAI website after the conference. The adoption of the Conduct for Events and Conferences will be announced at the AAAI-19 Opening Ceremony and both codes will be referenced at the Community meeting later in the week. An email address will be posted for inquiries.

#### Finance

David Smith took a moment to alert the Council to an email scam that was targeting AAAI officers asking for financial information, and asked them to be very careful before responding to any inquiries related to AAAI.

Smith then reviewed the performance of the AAAI investments over the course of 2018. The stock market has been volatile during the past year, but overall AAAI's investments have performed well over the longterm. He then reviewed the budget for 2019. With respect to the budget versus actual for 2018, the excess revenue for the AAAI Conference exceeded expectations by almost \$200,000, and is expected to exceed that amount for 2019. There was also excess revenue in several other cost centers, but for far lesser amounts. The net result was an overall gain of approximaley \$500,000 over expectations. He also noted that if we view our assets as an endowment, it is reasonable to draw down on an endowment by 3-5 percent per year. Given the state of our investments, this means that we could draw down by \$350,000-475,000 at the current time. The 2019 budget calls for a deficit of \$183.7K, which is well below this threshold. Smith noted that we are not required to draw down these funds each year, as a foundation is. Stone asked if it is reasonable to budget at this time for a loss of \$400,000 per year, and that if this is reasonable there is still room for further planned expenditures in 2019. Smith agreed that additional program expenditures were feasible. Gil suggested that the Council brainstorm some ideas for proposed uses of the funds, but that each committee should also think about ways to improve or

expand their missions. Returning to the budget, Smith noted that there were a few large differences from 2018. Primarily, there will be significant transition expenses in the magazine and publications area, as formats, staff, resources, overhead and procedures change. The Council formally approved the 2019 budget.

#### International

Qiang Yang reported that the committee, which has a very international membership, has met and that their main focus is to collect information about what is going on in AI in different countries across the world. To do this, they have sought collaborative initiatives with several national societies. The full scope of the committee's mission is still being formed.

Yang reported on recent initiatives in China, including the new AI and Robotics Society in Hong Kong, the establishment of an AI major at several major Chinese universities, and the establishment of a national lab in brain-like AI at the China University of Science and Technology (USTC). IJCAI will be held in Macao in 2019. He also reported on several major developments in AI in Japan, and Mausam brought the Council up to date on AAAI chapter activities in India. They would be interested in having a speaker from AAAI for their next event. He also noted that AI has become a primary focus for future challenges and initiatives for India.

Yang continued with an overview of recent developments in Europe, including the formation of the Confederation of Laboratories for Artificial Intelligence Research in Europe (CLAIRE), which is seeking endorsement from AAAI. Europe also instituted the General Data Protection Regulation (GDPR) law to protect privacy. Elsewhere in Europe, the European Lab for Learning and Intelligent Systems (ELLIS), has been formed, whose mission is to encourage the best basic research to be performed in Europe, to enable Europe to shape how machine learning and modern AI change the world, and to have economic impact and create jobs in Europe. Yang reported on several recent awards and other initiatives elsewhere in the world, including Canada and Australia.

Yang asked the Council to consider what AAAI's role should be in all of these significant developments. CLAIRE has asked for AAAI' endorsement, but most have not sought involvement from AAAI. Another important issue is whether AAAI should consider holding its conference outside of North America.

Mausam encouraged the Council to consider ways that AAAI could use its surplus to reach less advantaged international communities, perhaps by supporting faculty and student travel to our conference or by sending AAAI fellows or members to these locations in order to build our role globally. He also endorsed the idea of holding AAAI outside of North America, perhaps in the year when IJCAI is held in North America. He suggested that starting in Europe might be the easiest transition, with India and other parts of the world further in the future. This would be a further step in building our international presence and involving a more international community.

Gene Freuder suggested holding AAAI in Brussels, and would like to see an umbrella organization for all AI societies. Stone wondered if the idea of having one international organization is still being pursued. Gil noted that each organization has its own goals and initiatives and it is hard to form one cohesive organization.

Gil suggested that the conference committee study the idea of having AAAI in Europe or another international location. However, the Council should discuss how we want to connect with international organizations that are relevant to AI. Do we want to establish official points of contact for each organization so that we can connect more effectively? Should AAAI be promoting academic research internationally, such as AI and Ethics, or reach out to international government agencies about AI research? She suggested that AAAI promote and support its chapter program in various countries, which will establish contacts within each country.

Kambhampati noted that there had been discussions about taking the conference to China, but that IJCAI was already going. However, there were discussions about taking the symposium series to another country. He also suggested that instead of working with societies, AAAI can identify a meeting in another country and propose a role within that event. Mausam noted that moving a symposium or workshop to another location might reduce participation because funding is limited for these types of meetings. If the meeting is held in China, however, Kambhampati noted that attendance might be quite high compared to a typical fall symposium. Yang suggested a hybrid meeting of one-day symposia coupled with a second day of invited talks by AAAI fellows.

Bonet suggested that the Council identify its longterm goals for AAAI. Gil noted that these are stated in the mission of the organization, but agreed that the goals need to be turned into programs. We depend on volunteers, but if we have additional resources to bolster volunteer activities, it gives us the possibility to do something meaningful. Gil noted that the concerns of AI researchers are similar across borders, many stemming from the growth in the field. She encouraged the Council to identify more activities as an organization to support that growth.

Kambhampati noted that AAAI as an organization is seen as much more than a conference internationally, as opposed to the IJCAI model. He felt that AAAI should be for AI scientists what ACM is for computer scientists. AAAI is already known as a place for people to turn to on AI issues. Stone asked if we want to compete with other industry-oriented conferences that bill themselves as the "premier" AI conference / organization. Gil noted that AAAI was created to be the society to support the science of AI, so our goal should remain to be the premier AI scientific society. In this role, we have a responsibility to disseminate the science of AI and to support the pipeline of AI research through education.

Gil wondered if there should be a separate meeting to brainstorm about these long-range goals and programs, and will follow up on this idea after the conference.

Wrapping up the international discussion, Gil suggested that the International Committee connect with other societies and identify specific contacts within each, developing a network of people that we can call upon to organize international activities. She noted that there is no limit on the size of the international committee and ad hoc members are possible. Chapters are powerful at the local level, and it might be a way to connect international communities with AAAI.

Gene Freuder asked the Council to make a decision on CLAIRE's request for AAAI support of its mission. Howard asked whether AAAI has a set of guidelines for deciding on these types of requests, and if not, it seems that these guidelines should be drawn for future requests. Gil suggested that we vote on endorsing only the goals of CLAIRE, as their future activities are unknown. A motion to support the goals of CLAIRE was made and approved. The international committee will put together a specific statement regarding this support.

Cristina Conati also inquired whether we want to be more proactive in seeking affiliations with similar types of organizations or initiatives. The current conference outreach committee could be reformulated to establish outreach in this area. Eric Eaton also asked if we have any outreach to other areas, such as medicine, etc. This type of outreach should be included in this effort. Mausam agreed to chair the outreach committee to organize this kind of liaison effort.

#### Membership

Blai Bonet reported on the two most recent foci of the membership committee, including the Distinguished Speaker Series and the Chapter Program. The Council agreed that having distinguished speakers online via a webinar series as well as in person at member or chapter events would be preferable and more enriching. There are two pending chapter proposals, one of which is ready to move forward in the coming weeks. Freuder reviewed a proposal for corporate memberships in AAAI. Although there would be some conference benefits included with certain levels of membership, corporate memberships would have year-round benefits and corporate members would have visibility in other areas of AAAI. A Corporate Members Advisory Board would be

formed and some levels of corporate membership would have a seat on this board. Freuder asked the Council for feedback on whether AAAI would like to offer a corporate membership program, and if so, for suggestions on modifications or additions to the current proposal. Ayanna Howard noted that the proposed fees seemed low, and that there should be no free category, though a reduced fee for nonprofit organizations could be considered. The benefits would have to be examined carefully to be sure that the program does not lose money. Howard also pointed out that companies typically want access to students. Gil noted that it will be important to connect with members of the industry research community to be sure that the program addresses their needs and will be attractive to companies. Yang reported that the IEEE corporate member program allows members to set up or join a standards committee, which sets standards for new technologies in the industry. Many corporate members join specifically for this purpose. Yang inquired whether AAAI wants to organize standards committees as AI calls for more standards in such areas as machine learning, beta integration, compliance with government laws, financial services, and privacy. Carol Hamilton noted that setting standards in an industry is a complex process that would need to be investigated to see how it affects AAAI's nonprofit status. Gil suggested that we approach our corporate sponsors and get feedback on what would be worthwhile benefits for them. Eaton suggested sending a survey to sponsors to gather feedback on a corporate members program. Gil also suggested meeting with AAAI's top conference sponsors to see if the program can be enhanced. Freuder emphasized the need to assess whether sponsors want a longer-term relationship with AAAI and how that might be structured to be of benefit to all parties. Gil noted that access is to the job fair and students is important, but also mentioned that any efforts made to discuss issues that are important to industry will be well-received, such as ethics or safety. We could do more in our conference program to encourage connections with industry research labs. As we begin this process, these kinds of longer-term alliances will be useful. Carol Hamilton noted that sponsors seem very interested in connecting with senior members of the organization. Gil suggested setting up a meeting with sponsors during the conference to get some initial feedback on their experiences and the idea of a corporate membership.

#### Publications

David Leake reviewed the status of the transition process for the publications of AAAI. The plan to hire outside vendors to manage the production of the publications is underway. A vendor has been identified who will manage this process for both the AI Magazine and the various proceedings. Once that transition is complete and all of the inevitable complications have been worked out, the plan to hire a Publications Manager to manage the workflow, assure compliance with AAAI standards, and maintain the quality of publications will be carried out. As part of the new process, DOIs will be assigned to all proceedings papers. In addition, the printed magazine will be in full color. Leake reported that he and Ashok Goel will be doing a survey of AAAI members to get feedback on the magazine and what is most valuable to them. He welcomed assistance in putting together the survey from anyone who might have experience in that area.

Leake also reported that the Publications Committee will be studying the issue of the enormous growth of the proceedings in its upcoming meeting. The 2019 proceedings will have 1,346 papers, comprising approximately 14 volumes. The committee will be examining the cost and labor associated with such a large project, and ways that these might be controlled in the future, including the possibility of volunteer labor, removing student abstracts from the proceedings, and securing outside sponsorship of the proceedings. Freuder asked if feedback could be gathered from authors about the process for submitting papers, and to also see if the process can be simplified. Leake responded that they are always looking for ways to streamline the process. Gil noted that there are some requirements needed to make

papers archival, and that this has always been a primary goal of AAAI publications. She also suggested that with our extra resources it might be possible to assign DOIs retroactively. Leake also reported that proceedings from affiliate conferences will continue to be produced if resources are available and only if the projects break even. Discussions have begun with affected conferences to assess their desire to continue with the arrangement. Gil thanked Leake and Hamilton for all their efforts.

Ashok Goel noted that one of the main goals of the survey is to assess how well the magazine is doing in meeting the needs of the community, and using this as a benchmark, repeat the survey in a year or two to see how things are going. Goel welcomes input from the Council on survey questions. He also reviewed plans for upcoming issues of the AI Magazine, including a special issue on AI at DARPA, as well as a new proposed issue on AI and Society. He also noted that there is a new column on AI Bookie, edited by Chris Welty, Kurt Bollacker, and Praveen Paritosh, which focuses on bets about where AI will be in 10-15 years from now. The editors are looking for bold predictions about AI that will spark debates within the community, and encouraged the Council members to send short articles with their predictions. Goel reported that there are several other columns in the works on a variety of topics, such as OpenSource AI, AI and Education, and Reproducible AI. Goel also noted that ACM has expressed interest in including AI Magazine articles in CACM, which the publications will be discussing. Goel reviewed the plans for the interactive version of the magazine, and noted that Carol Hamilton has submitted a general outline for the process of developing the magazine, which will be discussed at the upcoming publications meeting. The first task will be to identify a scientific editor for the online version of the magazine, who will work directly with staff and editorial members of the team. Gil thanked Goel for all his work on the magazine.

#### Education

Eric Eaton reported that there are many good ideas for projects in the education area, but the key is to find volunteers who will take the initiative to make them happen. Eaton reported on four projects that the Education Committee has concentrated recently: (1) AI Magazine now contains an AI and Education column; (2) The establishment of an undergraduate research forum in conjunction with AAAI, with the possible inclusion of some graduate students, which has been proposed by Nate Derbinsky and Jim Boerkel. The Doctoral Consortium provides a forum for graduate students, but undergraduates tend to be a bit lost at the conference. The undergraduate forum would provide an opportunity for short presentations with posters, which would have a special section in one of the main poster sessions. Posters would be marked with special badges if the student is interested in pursuing graduate research. The forum would also include a faculty advice panel on how to apply to graduate schools, and transition successfully into graduate school, driving your research forward. This panel could also give advice on how to attend the conference successfully. Finally, graduate students could sponsor special lunches for undergraduates, providing a valuable mentoring opportunity. Alternately, the Fellows Lunches could reserve at least two seats per lunch for undergraduates. There is also the possibility of expanding the program to include graduate students who are not involved in the Doctoral Consortium. (3) The establishment of the AI4K12 Initiative. Gil noted that Dave Touretzky has been spearheading this project, forming an alliance with the Computer Science Teachers Association (CTSA). The goal is to develop curriculum for K-12 education, segmented into two-year intervals. They held a colocated event just before AAAI-19 in a local elementary school, and there were about 25 teachers present. This outreach provides a valuable way for AAAI to connect with local educational institutions. Touretzky will give a more detailed report later in the meeting. Gil also noted that the AI and Ethics Conference had a panel at the University of Hawaii, and there was another AI and Natural Disasters outreach program in conjunction with the University of Hawaii Hilo. She hopes that this kind of local outreach can continue and expand in future years. Blai Bonet also mentioned that

the Open House had been quite successful in its initial years, and that we might want to appoint a chair for this in the future. (4) Finally, Eaton mentioned that the committee is exploring ways to have more web-based items, including members-only webinars, providing AI Topics input, and creating outreach forums for the general public to make AI more accessible.

Christina Conati mentioned that she thought the Doctoral Consortium could benefit from further clarification of its goals, but agreed that having a separate forum for graduate students who are not yet eligible for the Doctoral Consortium would be extremely valuable. Freuder also mentioned that he has received feedback from industry members who would like students to be better prepared about what is expected in industry, and wondered if AAAI could provide more guidance in this area for both undergraduate and graduate students. This could be in the form of panels of people who are already in industry and willing to share their experiences. Other people from industry could explain what they are looking for. Mausam suggested that a mentorship or buddy program could be created where each student who requests it could be paired with a more senior researcher.

Gil noted that the charge of the Education Committee is guite broad, including the development of many conference-based programs, but also reaching out to the broader community on an ongoing basis, and even curriculum development. The Student Activities Cochairs have done a very good job of creating networking opportunities for students, and perhaps they can be charged with some of the conference-related initiatives. Eaton also mentioned that he would like to strengthen the connection between the Education Committee and EAAI. He would like to see EAAI take a broader role in committee efforts by developing programs that will accomplish some of the committee's goals, such as posting videos on the web. Gil also recommended that the committee connect with AI Hub activities in the future. She also suggested that the committee consider further connections with the Intel ISEF, at which AAAI presents three

awards each year. Perhaps winners could present their papers at AAAI. Gil also suggested having more news releases about AAAI awards at these types of events and other initiatives. The Executive Committee will be investigating the possibility of hiring a communications director.

#### Policy and Government Relations

Bart Selman reported that he and Gil have been working in conjunction with the CRA/CCC on a Roadmap for AI Research in the United States, with the goal of identifying priorities for research funding and providing guidance to US funding agencies and Congress. Currently, Selman noted that the AI research community does not have a strong voice in Washington, compared to other scientific communities, such as physics or biology. The goal of this committee is to find ways to develop better relationships in that arena. A key role for AAAI should be to advocate for academic and foundational research. A primary way that AAAI can achieve this is through the development of documents, such as the AAAI Response to NITRD RFI: National Artificial Intelligence Research and Development Strategic Plan (Octber 2018), that outline research directions and challenges for the field. Selman encouraged everyone to make suggestions for the Roadmap project in order to give feedback to the funding agencies. He emphasized that the Roadmap is studying large issues, such as the national AI infrastructure and AI workforce in order to sustain the field and drive innovation. The government is currently willing to invest in AI, and if the research community does not speak up, the money will be spent on other AI endeavors. Gil wondered if AAAI should consider using affiliations with other organizations, such as CRA, who are better positioned in Washington. Selman noted that the perception in Washington is that most AI research is conducted in industry. As a result, industry has a very strong voice in Washington, and therefore academic computer scientists have limited influence. A lot of funding is application-oriented, and shorter-term projects are favored. Research funding needs to have a much longer timeline of 30+ years.

With regard to the Roadmap, Gil and Selman are finalizing a summary of recommendations so this is a good time to send input. Selman noted that other countries are already funding and building strong infrastructures to support AI research. Conati mentioned that this kind of coordinated effort is what was the driving force behind the formation of CLAIRE, discussed earlier. Since AAAI is the premier AI scientific society, it is important to bring the message of this community to the government. Yang suggested that the committee put together a list of contacts in other countries, who could contribute to a white paper discussing how the world is funding AI.

Before moving to new business, Gil presented Rao Kambhampati with a special plaque for his presidential gavel, and another plaque to Tom Dietterich in honor of his service to AAAI as Councilor, President-Elect, President, and Past President. Kambhampati stepped down as President and Dietterich as Past President in the summer of 2018. Gil thanked them both for their many years of service to the organization.

## New Business

#### AI4K12 Initiative

Dave Touretzky of Carnegie Mellon University and Christina Gardner-McCune of the Computer Science Teachers Association (CSTA) reported on the activities of the AI4K12 Initiative, sponsored by AAAI and CSTA. Their mandate is to develop national guidelines for teaching AI curricula. They want to define what students should know at different grade bands, and what they should be able to do. They are also developing a curated AI resource directory for teachers that will contain items, such as demos, videos, recommended books, activities, professional development opportunities, etc. Although this effort concentrates on US guidelines, the group is interested in talking with people in other countries about what they are doing. The Initiative consists of a small Steering Committee, as well as a larger Working Group with teacher representatives from several grade bands, and industry and academia members. An Advisory Group serves as a resource for the group, and is comprised of senior individuals who have worked on related projects. The Initiative has applied for an NSF grant.

The group has already formed an extensive mailing list, and has met at several venues during the past 6-8 months, including a workshop colocated with the AAAI Fall Symposium Series and an outreach workshop just prior to AAAI-19 with 50 attendees from all five Hawaiian islands. They will run a panel at EAAI and present a Blue Sky talk at the main conference. They already have several more events planned for 2019. The group has brainstormed a list of big ideas in AI, circulated it to the teachers, and asked them to translate each big idea into what it would look like at for their grade band, with suggested activities. The five big ideas that the Initiative has developed for the K12 community are as follows: Perception, Representation and Reasoning, Learning, Natural Interaction, and Societal Impact. Goel invited Touretzky and Gardner-McCune to consider writing an article for AI Magazine on this effort, and Gil will announce the project at the Community Meeting later in the week.

## AIHub

Tom Dietterich started working on the AIHub project with Sabine Hauert with the goal of building AAAI's presence on social media. Hauert founded RoboHub for the robotics community, which is a website linked to news stories, and more importantly, to short technical stories geared toward the general public about recent developments in the field. AIHub is intended to do the same for the AI field. This effort is supported by several different AI organizations, as a substantial investment is needed to fund the editor of the site. The funding threshold has now been met, and the site will launch very soon, with short courses beginning at the Spring Symposium. Each funding organization has two seats on the Editorial Board; AAAI's representatives are Michael Littman and Michela Milano. Their main task at the moment is to find a managing editor. They welcome input from the Council on possible candidates. The group is also collaborating with AI Topics, and is also anxious to collaborate with AI Magazine on possible articles to

cross-post to drive traffic to *AI Magazine*. AAAI has committed \$20K per year for three years for the AIHub project, as well as a small amount to assist with initial paperwork.

#### CRA Report

Charles Isbell, the AAAI Liaison to the Computing Research Association (CRA), reported that one of the primary topics at the last CRA Board meeting was the impact of PhD students leaving academe to join industry. The demand for computer science students, as well as junior and senior faculty is increasing, while the supply is being depleted by this drain from industry. The trend is being driven primarily by machine learning and AI. CRA is in the process of forming a committee, which will hold a workshop to study the issues involved. The committee will determine if there is a significant problem, and the extent to which it affects computer science as a whole or just certain schools and research areas of the community. They will further define the demographics of the people moving to industry (students, faculty, and so on) and their motivations for doing so. They will study the effects this trend is having on computer science departments across the country, especially with the significant increase in interest from students (both computer science and noncomputer science majors) in computer science courses, specifically machine learning and AI. Tangential issues include whether academe should continue to allow faculty to spend more than 50 percent of their time in industry appointments, and whether this practice hurts schools closer to industry clusters. Gil inquired whether a comparative salary study would be included in the final report, and the significant impact the salary issue is having on university budgets. Gil noted that the AI community is anxious to engage in discussions about these topics, and Isbell agreed it would be worthwhile to think about what we want to say to the CRA committee once it is formed. Gil suggested that this might be an area where AAAI could partner with CRA to move the dialogue forward. Blai Bonet asked if CRA has identified this as a US-only issue, or whether it affects the international community. Isbell responded that the current focus is the US trend, but that the longterm focus will likely be international.

#### **Diversity Committee**

Gil proposed forming an ad hoc committee to spearhead diversity and inclusion initiatives for AAAI. The committee will identify and propose diversity candidates for AAAI awards, Council positions, and other leadership opportunities. The committee would also foster mentorship opportunities for underrepresented groups, such as mentoring events. For instance, AAAI already holds the Women's Mentoring Breakfast, the Black in AI Mentoring lunch, and the LatinX in AI Mentoring lunch. Finally, the committee will provide feedback to the conference committee on accessibility, participation, and opportunities for conference attendees. As an example, we have been asked to provide childcare services at the conference, which will commence in 2020. There are many conditions that can present challenges for attendees, such as color blindness or physical limitations, so it will be helpful for the committee to gather information about these things so that practices can be initiated to help address them. Defining diversity more broadly, the committee will study ways to be more inclusive geographically, and with regard to industry participation. Selman suggested that the committee also be charged with reminding all committee chairs to be mindful of diversity concerns and goals in the execution of their duties. It is important for all committees to take a proactive approach to the issue of diversity. A suggestion was made to also have a specific Diversity Chair for the conference. Cristina Conati encouraged the Council to make the mandate of the Diversity Committee clear to increase its effectiveness. Mausam noted that the Diversity Committee will have to be kept informed of upcoming calls and other announcements in order to have input on ways to make them more effective from a diversity standpoint. Gil envisions the Diversity Committee as being a resource for other committees that might not have the time to specifically address these issues. Claire Monteleone suggested

that determining the best way to advance diversity for AAAI will be part of the work of the Diversity Committee. She also was very supportive of the formation of the committee, given the recent events at other AIrelated conferences. The proposal to establish the ad hoc committee was enthusiastically supported by the committee.

#### AAAI Sponsorship of AI Roadmap

Gil reminded the Council of the Townhall that evening to discuss the 20-Year Roadmap for AI Research that she and Bart Selman have been chairing. The Roadmap is a response to a request from several government agencies, including NSF and OSTP, to CRA/CCC. The issue before the Council is whether AAAI should officially endorse the report or be listed as a cosponsor. The input from AAAI has been significant as several past presidents have led or participated in the associated workshops. The first document draft will be available at the end of February. This effort is distinct from and unrelated to the AI100 study, which looks at what is likely to happen in AI, and educates people about the reality versus the hype in the media. Selman noted that it is unclear exactly what will be allowed on the report to acknowledge AAAI's contribution and endorsement, but noted that this would give AAAI heightened visibility. Selman also noted that the Roadmap workshop committees comprised US members only, and were not internationally based. Gil reminded the group that the Roadmap is not a political roadmap, but a research roadmap, and suggested that AAAI welcome representatives of other countries to create research roadmaps as well. The current Roadmap will have specific recommendations for the US research community, but future roadmaps can address international communities. There was overall support from the Council to endorse the Roadmap, but Selman reminded the Council that the exact wording will be determined by CRA. Gil and Selman will present the Roadmap at the evening Townhall as an activity that AAAI is working with CCC on to produce a report. The Council supported this position.

The meeting adjourned at 3:15 pm.