SIGAI Annual Report: July 1 2019 – June 30 2020

Sanmay Das (elected; ACM SIGAI Chair)
Nicholas Mattei (elected; ACM SIGAI Vice-Chair)
John P. Dickerson (elected; ACM SIGAI Secretary/Treasurer)
Sven Koenig (elected; ACM SIGAI Past-Chair)
Louise Dennis (appointed; ACM SIGAI Conference Coordination Officer)
Larry Medsker (appointed; ACM SIGAI Public Policy Officer)
Todd Neller (appointed; ACM SIGAI Education Activities Officer)
Iolanda Leite (appointed; ACM SIGAI Newsletter Editor-in-Chief)
Anuj Karpatne (appointed; ACM SIGAI Newsletter Editor-in-Chief)

Introduction

It has been a first year full of unexpected challenges for the new officers of SIGAI! Along with the election of a new leadership team, we began the year with many changes, including integrating a new leadership team, changes in several of the appointed officers, and of course the global pandemic which has radically altered many of our activities! Of particular note, we are excited to welcome on board Louise Dennis as the new conference coordination officer, Anuj Karpatne as a new co-editor for AI Matters, and Alan Tsang as the new information officer, taking over from Michael Rovatsos, Amy McGovern, and Hang Ma respectively. We are very grateful to Michael, Amy, and Hang for years of excellent service to SIGAI! While we were working on several new initiatives, like everyone else, the Covid-19 pandemic changed the nature of what we were able to do and what we had to focus on. Nevertheless, we managed to get several of these initiatives off the ground, and were lucky in that SIGAI was well-positioned both financially and in terms of our rapport with many communities.

Meetings

ACM's Meetings as a whole have been greatly impacted by the ongoing Covid-19 crisis. For SIGAI, this started with the last-minute cancellations of IUI 2020 and HRI 2020 (with HRI, despite the short notice, heroically managing to pull together an online version of the conference). Fortunately, ACM SIGAI's funds were

robust enough that we could successfully absorb our share of the costs of these cancellations while continuing with the SIG's other activities. Since the crisis began to unfold in February and March the ACM has been building up a store of expertise and support services for online conferences that are now available to conferences running in cooperation with, or sponsored by, ACM SIGAI.

ACM SIGAI sponsored the following conferences:

- IVA 2019
- WI 2019
- ASE 2019
- AIES 2020
- IUI 2020 (cancelled)
- HRI 2020 (moved online)

and it will sponsor the following conferences coming up in 2020 and 2021:

- ASE 2020
- IVA 2020
- CSCS 2020
- WI 2020
- IUI 2021

ACM SIGAI approved the following in-cooperation requests from events covering a wide thematic and geographical range across the international AI community:

- RecSys 2020
- CSCS 2019

- K-CAP 2019
- AIVR 2019
- BIOSTEC 2020
- ICAART 2020
- ICPRAM 2020
- ICEIS 2020
- AAMAS 2020
- IEA/AIE 2020
- MSR 2020
- DeLTA 2020
- IC3K 2020
- IJCCI 2020
- ROBOVIS 2020
- ICINCO 2020
- FDG 2020
- ICPRAM 2021
- BIOSTEC 2021
- ICAART 20201
- IEA/AIE 2021

ACM SIGAI has continued to work with conferences to encourage participation in the ACM Carbon Offsetting scheme but this is necessarily somewhat on hold.

Financial Support

In 2019 ACM SIGAI introduced a student travel award scheme intended to help fund conference attendance for student ACM members. This extended long-standing collaborations with specific conferences to fund student attendance. This funding is being targeted towards conferences sponsored by, or in-cooperation with, SIGAI and at students presenting work at those conferences - though other applications are exceptionally considered. Sixteen students were funded by this scheme primarily to attend IVA 2019 and ASE 2019. The majority of these students were studying at US institutions.

As part of a long-standing arrangement, we also helped fund the attendance of six students to the AAAI Doctoral Consortium. Most of these were studying in Europe, though one was based in Australia and one in Canada.

While the nationalities of the students we have given travel awards to is more diverse than the institutions where they are studying, the vast majority have still come from the USA, Canada or Europe. At present, understandably, we have very few applications coming in through the scheme (only one in all of 2020 to date). Once conference travel is more widespread again we will revisit in particular the way the scheme is advertised in the hope that we can support a wider range of conferences.

We also ran a second round of the AI Activities Fund call for proposals, focused on outreach and other activities that can be done entirely virtually and received several strong proposals. We are in the process of finalizing funding decisions at the time of writing, and expect to fund 4 or 5 proposals with between $1000 – $2000 of support going to each one that is funded. These awarded activities will be writing reports in AI Matters after completion of the work.

Awards

ACM SIGAI sponsors the ACM SIGAI Autonomous Agents Research Award, an annual award for excellence in research in the area of autonomous agents. The recipient is invited to give a talk at the International Conference on Autonomous Agents and Multiagent Systems (AAMAS). The 2020 ACM SIGAI Autonomous Agents Research Award was presented (virtually) at AAMAS 2020 in Auckland, New Zealand to Munindar Singh, the Alumni Distinguished Professor of Computer Science at North Carolina State University, for his extensive contributions to our understanding of social interaction and autonomy in Artificial Intelligence through his seminal work on interaction protocols, norms, and trust in multiagent systems.

ACM SIGAI also sponsors the ACM SIGAI Industry Award for Excellence in AI, a new annual award which is given annually to an individual or team in industry who created a fielded AI application in recent years that demonstrates the power of AI techniques via a combination of the following features: novelty of application area, novelty and technical excellence of the approach, importance of AI techniques for the approach and actual and predicted societal impact of the application. The inaugural ACM SIGAI Industry

Award for Excellence in AI was presented at the International Joint Conference on AI (IJ-CAI) 2019 in Macau to the Real World Reinforcement Learning Team from Microsoft. The process for the 2020 award and the IJCAI 2020 conference was severely impacted due to the COVID-19 outbreak. Hence, there is no award for 2020 but the committee is working hard for the 2021 award.

ACM SIGAI also recently created, jointly with AAAI, the AAAI/ACM SIGAI Doctoral Dissertation Award to recognize and encourage superior research and writing by doctoral candidates in AI. This new annual award will be presented at the AAAI Conference on AI in the form of a certificate and is accompanied by the option to present the dissertation at the AAAI conference as well as to submit a six-page summary to both the AAAI proceedings and the ACM SIGAI newsletter. We received 20 nominations for the inaugural award and selection is nearly complete. The award will be presented at AAAI 2021, for dissertations completed in the 2019-2020 academic year.

Public Policy and AI Ethics

Within ACM, we work with the ACM US Technology Policy Committee (USTPC) through the membership of our public policy officer Larry Medsker. He includes selected USTPC issues in his ACM SIGAI Public Policy blog posts. In 2019 he represented SIGAI in his dinner presentation on AI public policy and ethics at the USTPC board's annual meeting. The SIGAI Public Policy Officer participates in workshops and briefings in Washington, DC, that bring together legislators, staffers, corporate representatives, and non-profit organizations for discussions of policy making related to AI.

The bi-monthly posts on the AI Matters Public Policy blog in the past year commented on a wide variety of current topics, including:

- AI and face recognition and the USTPC public statement on face recognition
- A series of blogs on fundamentals of bias, discrimination, and fairness
- Human-centered design of AI systems
- AI ethics impacts on policymaking
- The role of data in AI and policy

- AI policy on privacy, accountability, and transparency
- Policymaking for AI and the workforce of the future
- VISA exemption for international students
- Frameworks and guidelines for principles of AI
- Federal government guidance and strategies on AI policy
- G20 and European activities in AI and data
- Global race for AI dominance

Outside of ACM, our public policy officer has participated in the executive committee of the IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems. In June 2020, he became a Co-Editor-in-Chief for the new Springer Nature journal AI and Ethics.

Education Initiatives

It was another good year for expanding our Model AI Assignment archive (http://modelai.gettysburg.edu/). Our EAAI-2020 track was again successful, attracting 9 new accepted, peer-reviewed projects into our archive and presented at EAAI-2020 in New York, New York, USA on February 8 and 9 (https://pages.mtu.edu/~lebrown/eaai/index.html).

At EAAI, we announced our latest mentored undergraduate research challenge: AI for Gin Rummy competitive play under tight real-time constraints (http://cs.gettysburg.edu/~tneller/games/ginrummy/eaai/). Despite, or perhaps because of, the pandemic, we have had excellent participation with 50 mentors and students yielding 14 entries by the deadline on August 9th. We will be evaluating entries in the coming weeks, and hope to see a similarly good yield for the corresponding paper track at EAAI-21.

Following the success of the 2017 and 2018-2019 ACM SIGAI Essay Contest on the use of AI Technology we began preparation for the 2020-2021 version (to run during the school year). We are approaching this year with a renewed interest in the effects of AI Technology in Society in light of the changing world due to COVID-19. This year's contest is planned to

be run in conjunction with ACM SIGCSE to involve more students from across AI and computer science broadly. We completed publishing all 8 winners from the 2018-2019 in AI Matters with Volume 5, Issue 3, 2019 issue.

Newsletter

The ACM SIGAI newsletter is distributed via the ACM SIGAI mailing list but also openly available on the ACM SIGAI web-site (at sigai.acm.org/aimatters/). AI Matters features articles of general interest to the AI community. ACM SIGAI publishes four issues of its newsletter AI Matters per year. Due to the pandemic, in 2020 we are only planning to publish three issues.

In the past year, we added a new editor-in-chief, Anuj Karpatne, who came to the position after the anticipated departure of Amy McGovern. We also welcomed a new column editor, Louise Dennis, who took responsibility for the News and Events column, succeeding Michael Rovatsos.

The recurring columns in AI matters have included:

- AI Interviews (with interesting people from academia, industry, and government, led by the diversity officer),
- AI Amusements (including AI humor, crossword puzzles, and games),
- AI Education (led by the education activities officer),
- AI Policy Issues (led by the public policy officer),
- AI Buzzwords (which explains new AI concepts or terms),
- AI Events (which includes conference announcements and reports, led by the conference coordination officer)
- AI Dissertation Abstracts and News from AI Groups and Organizations;
- AI Latest Research Trends (where we invite recent recipients of competitive grants to write about their latest research projects, currently led by the co-editors in chief).

We are planning an additional recurring column dedicated to diversity in AI. AI Matters also published the winning entries from the 2018 ACM SIGAI Student Essay Contest on the Responsible Use of AI Technologies.

Job Fair

AAAI and ACM SIGAI have partnered to run the popular AAAI/ACM SIGAI Job Fair for the last six years. In lockstep with the growth of AAAI and the growth of the greater artificial intelligence and machine learning (AI/ML) community, our once-small job fair also grew. At AAAI-20, thirty-eight companies and universities formally attended, typically with a booth, team of recruiters, swag, and other representatives, increasing from twenty-six companies during the job fair's previous run in 2019, and twenty-one companies in the year prior to that. In 2021, Michael Albert (U Virginia), John Dickerson (Maryland), and Matthew Taylor (Alberta) will co-run the job fair which will be virtual-only for the first time. We own a dedicated domain at https://aaaijobfair.com/ for the job fair. We typically provide a link on that site through which job-seekers, students, post-docs, practitioners, and maybe even a few faculty, can upload their resumes or CVs. We then share that data and contact information for the job-seekers with participants on the other side: prospective employers. This past year was no different, and we connected many hundreds of job-seekers to employers at the job fair.

Planning for the Future

The nature of the pandemic has changed many of our priorities, and also, of course, made it difficult for many of our volunteers to serve at the level of energy they have in the past, given the many different demands on their time. Nevertheless, we are excited by the direction of SIGAI. In particular, the new awards and outreach activities to both students, job-seekers, and the broader community we have worked on over the last few years . We also have several successful activities that are joint with other organizations, including many conferences co-sponsored with other ACM SIGs, conferences, the doctoral consortium, and the new dissertation award with AAAI, and continue to work with IFAA-MAS and IJCAI on joint agreements related to some of our major awards. We view such collaborations as a highlight and a strength,

since they benefit the greater AI and computing communities. In the coming year, an area that we want to continue to focus on is improving our reach in industry and those interested in applied AI more generally. In addition, we are working to revamp our website and social media presence to offer more opportunities to engage with SIGAI, and more outreach into the broader community of people interested in Artificial Intelligence!