2018 ACM SIGAI Student Essay Contest on Artificial Intelligence Technologies

Win one of several $500 monetary prizes or a Skype conversation with a leading AI researcher including Joanna Bryson, Murray Campbell, Eric Horvitz, Peter Norvig, Iyad Rahwan, Francesca Rossi, or Toby Walsh.

See this call online at www.tinyurl.com/SIGAIEssay2018

Students interested in these topics should consider submitting to the [2019 Artificial Intelligence, Ethics, and Society Conference (AIES)](). Deadline is in early November.

2018 Topic

The ACM Special Interest Group on Artificial Intelligence (ACM SIGAI) supports the development and responsible application of Artificial Intelligence (AI) technologies. From intelligent assistants to self-driving cars, an increasing number of AI technologies now (or soon will) affect our lives. Examples include Google Duplex ([Link]()) talking to humans, Drive.ai ([Link]()) offering rides in US cities, chatbots advertising movies by impersonating people ([Link]()), and AI systems making decisions about parole ([Link]()) and foster care ([Link]()). We interact with AI systems, whether we know it or not, every day.

Such interactions raise important questions. ACM SIGAI is in a unique position to shape the conversation around these and related issues and is thus interested in obtaining input from students worldwide to help shape the debate. We therefore invite all students to enter an essay in the 2018 ACM SIGAI Student Essay Contest, to be published in the ACM SIGAI newsletter "AI Matters," addressing one or both of the following topic areas (or any other question in this space that you feel is important) while providing supporting evidence:

- **What requirements, if any, should be imposed on AI systems and technology when interacting with humans who may or may not know that they are interacting with a machine? For example, should they be required to disclose their identities? If so, how? See, for example, "Turing's Red Flag" in CACM ([Link]()).**
- **What requirements, if any, should be imposed on AI systems and technology when making decisions that directly affect humans? For example, should they be required to make transparent decisions? If so, how? See, for example, the IEEE's summary discussion of Ethically Aligned Design ([Link]()).**

Each of the above topic areas raises further questions, including

- **Who is responsible for the training and maintenance of AI systems? See, for example, Google's ([Link](#)), Microsoft's ([Link](#)), and IBM's ([Link](#)) AI Principles.**
- **How do we educate ourselves and others about these issues and possible solutions? See, for example, new ways of teaching AI ethics ([Link](#)).**
- **How do we handle the fact that different cultures see these problems differently? See, for example, Joi Ito's discussion in Wired ([Link](#)).**
- **Which steps can governments, industries, or organizations (including ACM SIGAI) take to address these issues? See, for example, the goals and outlines of the Partnership on AI ([Link](#)).**

All sources must be cited. However, we are not interested in summaries of the opinions of others. Rather, we are interested in the informed opinions of the authors. Writing an essay on this topic requires some background knowledge. Possible starting points for acquiring such background knowledge are:

- the revised ACM Code of Ethics ([Link](#)), especially Section 3.7, and a discussion of why the revision was necessary ([Link](#)),
- IEEE's Ethically Aligned Design ([Link](#)), and
- the One Hundred Year Study on AI and Life in 2030 ([Link](#)).

ACM and ACM SIGAI

ACM brings together computing educators, researchers, and professionals to inspire dialogue, share resources, and address the field's challenges. As the world's largest computing society, ACM strengthens the profession's collective voice through strong leadership, promotion of the highest standards, and recognition of technical excellence. ACM's reach extends to every part of the globe, with more than half of its 100,000 members residing outside the U.S. Its growing membership has led to Councils in Europe, India, and China, fostering networking opportunities that strengthen ties within and across countries and technical communities. Their actions enhance ACM's ability to raise awareness of computing's important technical, educational, and social issues around the world. See https://www.acm.org/ for more information.

ACM SIGAI brings together academic and industrial researchers, practitioners, software developers, end users, and students who are interested in AI. It promotes and supports the growth and application of AI principles and techniques throughout computing, sponsors or co-sponsors AI-related conferences, organizes the Career Network and Conference for early-stage AI researchers, sponsors recognized AI awards, supports AI journals, provides scholarships to its student members to attend conferences, and promotes AI education and publications through various forums and the ACM digital library. See https://sigai.acm.org/ for more information.

Format and Eligibility

The ACM SIGAI Student Essay Contest is open to all ACM SIGAI student members at the time of submission. (If you are a student but not an ACM SIGAI member, you can join ACM SIGAI before submission for just US$ 11 at https://goo.gl/6kifV9 by selecting Option 1, even if you are not an ACM member.) Essays can be authored by one or more ACM SIGAI student members but each ACM SIGAI student member can (co-)author only one essay.

All authors must be SIGAI members at the time of submission. All submissions not meeting this requirement will not be reviewed.

Essays should be submitted as pdf documents of any style with at most 5,000 words via email to **https://easychair.org/conferences/?conf=acmsigai2018.**

The deadline for submissions is January 10th, 2019.

The authors certify with their submissions that they have followed the ACM publication policies on "Author Representations," "Plagiarism" and "Criteria for Authorship" (http://www.acm.org/publications/policies/). They also certify with their submissions that they will transfer the copyright of winning essays to ACM.

Judges and Judging Criteria

Winning entries from last year's essay contest can be found in recent issues of the ACM SIGAI newsletter "AI Matters," specifically Volume 3, Issue 3: http://sigai.acm.org/aimatters/3-3.html and Volume 3, Issue 4: http://sigai.acm.org/aimatters/3-4.html.

Entries will be judged by the following panel of leading AI researchers and ACM SIGAI officers. Winning essays will be selected based on depth of insight, creativity, technical merit, and novelty of argument. All decisions by the judges are final.

- Rediet Abebe, Cornell University
- Emanuelle Burton, University of Illinois at Chicago
- Sanmay Das, Washington University in St. Louis
- John P. Dickerson, University of Maryland
- Virginia Dignum, Delft University of Technology
- Tina Eliassi-Rad, Northeastern University
- Judy Goldsmith, University of Kentucky
- Amy Greenwald, Brown University
- H. V. Jagadish, University of Michigan
- Sven Koenig, University of Southern California
- Benjamin Kuipers, University of Michigan
- Nicholas Mattei, IBM Research

- Alexandra Olteanu, Microsoft Research
- Rosemary Paradis, Leidos
- Kush Varshney, IBM Research
- Roman Yampolskiy, University of Louisville
- Yair Zick, National University of Singapore

Prizes

All winning essays will be published in the ACM SIGAI newsletter "AI Matters." ACM SIGAI provides five monetary awards of USD 500 each as well as 45-minute skype sessions with the following AI researchers:

- Joanna Bryson, Reader (Assoc. Prof) in AI, University of Bath
- Murray Campbell, Senior Manager, IBM Research AI
- Eric Horvitz, Managing Director, Microsoft Research
- Peter Norvig, Director of Research, Google
- Iyad Rahwan, Associate Professor, MIT Media Lab and Head of Scalable Corp.
- Francesca Rossi, AI and Ethics Global Lead, IBM Research AI
- Toby Walsh, Scientia Professor of Artificial Intelligence, UNSW Sydney, Data61 and TU Berlin

One award is given per winning essay. Authors or teams of authors of winning essays will pick (in a pre-selected order) an available skype session or one of the monetary awards until all skype sessions and monetary awards have been claimed. ACM SIGAI reserves the right to substitute a skype session with a different AI researcher or a monetary award for a skype session in case an AI researcher becomes unexpectedly unavailable. Some prizes might not be awarded in case the number of high-quality submissions is smaller than the number of prizes.

Questions?

In case of questions, please first check the [ACM SIGAI blog for announcements and clarifications](#). You can also contact the ACM SIGAI Student Essay Contest Organizers at sigai@member.acm.org.

Nicholas Mattei (IBM Research)
ACM SIGAI Student Essay Contest Organizer and AI and Society Officer

with involvement from

- Sven Koenig (University of Southern California), ACM SIGAI Chair
- Sanmay Das (Washington University in St. Louis), ACM SIGAI Vice Chair
- Rosemary Paradis (Leidos), ACM SIGAI Secretary/Treasurer
- Benjamin Kuipers (University of Michigan), ACM SIGAI Ethics Officer
- Amy McGovern (University of Oklahoma), ACM SIGAI AI Matters Editor-in Chief