



2018 ACM SIGAI Student Essay Contest on Artificial Intelligence Technologies

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Abstract

Win one of several prizes including \$500USD or a chat with a leading AI Researcher. For complete details, including submission requirements, formats, and judges please see: www.tinyurl.com/SIGAIEssay2018

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? For example, the IEEE’s 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](#)).

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 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 [AI Matters Easychair](#).

The deadline for submissions is January 10th, 2019.

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 one of 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

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](#) and [Volume 3, Issue 4](#).

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

Main organization by Nicholas Mattei (IBM Research), 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; and Amy McGovern (University of Oklahoma), ACM SIGAI AI Matters Editor-in Chief.

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



Nicholas Mattei is a Research Staff Member in the IBM Research AI group at the IBM TJ Watson Research Laboratory. His research focuses on the theory and practice of AI, developing systems and algorithms to support decision making.
