

Awards

ACM/SIGAI Autonomous Agents Research Award

The ACM/SIGAI Autonomous Agents Research Award is an annual award for excellence in research in the area of autonomous agents. The award is intended to recognize researchers in autonomous agents whose current work is an important influence on the field. The award is an official ACM award, funded by an endowment created by ACM SIGAI from the proceeds of previous Autonomous Agents conferences. Prior to 2014, it was known as the ACM/SIGART Autonomous Agents Award. Candidates for the award are nominated through an open nomination process. Previous winners of the award were Craig Boutilier (2018), David Parkes (2017), Peter Stone (2016), Catherine Pelachaud (2015), Michael Wellman (2014), Jeffrey S. Rosenschein (2013), Moshe Tennenholtz (2012), Joe Halpern (2011), Jonathan Gratch and Stacy Marsella (2010), Manuela Veloso (2009), Yoav Shoham (2008), Sarit Kraus (2007), Michael Wooldridge (2006), Milind Tambe (2005), Makoto Yokoo (2004), Nick Jennings (2003), Katia Sycara (2002), and Tuomas Sandholm (2001). The selection committee for the ACM/SIGAI Autonomous Agents Research Award is pleased to announce that Professor Carles Sierra is the recipient of the 2019 award. Professor Sierra is Vice-Director of the Artificial Intelligence Research Institute (IIIA) of the Spanish National Research Council (CSIC). He has made seminal contributions to research on negotiation and argumentation, computational trust and reputation, and artificial social systems. His work has pursued answers to fundamental agent research questions: how to interact and with whom, and how to design frameworks for agent interaction. This work played a significant role in establishing the foundations for these questions and motivating further research across the community. Prof. Sierra has also served the autonomous agents research community in a variety of roles, including General Chair of the AAMAS conference, its Program Chair and Editor in Chief of the JAAMAS journal.

AAMAS Victor Lesser Distinguished Dissertation Award

This award was started for dissertations defended in 2006 and is named for Professor Victor Lesser, a long standing member of the AAMAS community who has graduated a large number of outstanding PhD students in the area. To be eligible for the 2018 award, presented at AAMAS 2019, a dissertation had to have been written as part of a PhD defended during the year 2018, and had to be nominated by the supervisor with three supporting references. Selection is based on originality, depth, impact and written quality, supported by quality publications. Previous winners of this award were Ariel Rosenfeld (2017), Nisarg Shah (2016), Amos Azaria (2015), Yair Zick (2014), Manish Jain (2013), Birgit Endrass (2012), Daniel Villatoro (2011), Bo An (2010), Andrew Gilpin (2009), Ariel Procaccia (2008), Radu Jurca (2007), and Vincent Conitzer (2006). The 2018 IFAAMAS Victor Lesser Distinguished Dissertation Award recipient is Dr. Fernando P. Santos, whose thesis entitled ‘Dynamics of Reputations and the Self-organization of Cooperation’ was supervised by Prof. Francisco C. Santos, Prof. Jorge M. Pacheco, and Prof. Ana Paiva.

IFAAMAS Influential Paper Award

The International Foundation for Autonomous Agents and Multi-Agent Systems set up an influential paper award in 2006 to recognize publications that have made seminal contributions to the field. Such papers represent the best and most influential work in the area of autonomous

agents and multi-agent systems. These papers might, therefore, have proved a key result, led to the development of a new sub-field, demonstrated a significant new application or system, or simply presented a new way of thinking about a topic that has proved influential. The award is open to any paper that was published at least 10 years before the award is made. The paper can have been published in any journal, conference, or workshop. The award is sponsored by the Agent Theories, Architectures and Languages foundation.

The 2019 IFAAMAS Influential Paper Award winners are:

Daniel S. Bernstein, Shlomo Zilberstein, and Neil Immerman.

The complexity of decentralized control of Markov decision processes.

In *Proceedings of the Sixteenth conference on Uncertainty in Artificial Intelligence*, June 2000, pages 32-37

Daniel S. Bernstein, Robert Givan, Neil Immerman, and Shlomo Zilberstein.

The complexity of decentralized control of Markov decision processes.

Mathematics of Operations Research, 27(4), 2002, pages 819-840

These papers formally introduced the decentralized partially observable Markov decision process (Dec-POMDP), launching a subfield on principled models and solution methods for multiple cooperative agents with uncertainty and limited communication. Since then, the influence of the paper has spread widely and was followed by numerous other publications that include many theses, journal articles, conference papers and a recent book. Authors inspired by the original Dec-POMDP paper have won awards in AI conferences such as the best paper award at AAMAS in 2003 and 2014, a nomination for best student paper at AAMAS in 2011, an outstanding student paper honorable mention at AAAI 2019 as well as a nomination for best paper at one of the leading robotics conferences (RSS) in 2015. Dec-POMDP methods have become well known in the AI community (e.g., becoming a popular model for deep multi-agent reinforcement learning) and have begun to be used in fields such as robotics and networking.