

Preface

The International Joint Conferences on Artificial Intelligence (IJCAI) will hold its 25th meeting in New York City from July 9th to 15th, 2016.

IJCAI-2016 is different from earlier conferences in the IJCAI series in various respects. It is the first conference of its kind taking place one year after the last IJCAI (and the first-ever leap year one!). The decision of the IJCAI organization to switch from biannual to annual meetings was somewhat risky. In particular, it was not clear what effect this move would have on the number of submissions, workshop and tutorial proposals, and participants.

We are excited to report that the interest in IJCAI remains unabated. In fact, we received a record number of paper submissions (2294, which amounts to a 15 percent increase compared to IJCAI-15, itself a record breaker). Of these, 551 papers were accepted for presentation at the conference. The number (and quality) of accepted workshops and tutorials also was extremely high. We firmly believe the program put together is representative of the most exciting research in AI taking place today.

In our view one of the major roles of the flagship AI conference is to provide a forum for reintegrating diverse subfields of AI. For this reason we decided not to have vertical special tracks this year: that is, special tracks divided along specific subtopics such as knowledge representation, machine learning, planning and the like. We did introduce a “horizontal” special track, though, namely the AI and Web track. This track was chaired by Evgeniy Gabrilovich and Mausam and represents one of the most exciting current application areas for a broad range of AI techniques.

The special theme of this year’s conference is Human-Aware Artificial Intelligence — we have technical paper sessions, invited talks and panels organized around this theme, focusing on the many benefits of AI systems working in collaboration with humans.

All accepted papers are included as full-length papers in these proceedings. Authors are invited to present their papers both orally and as posters. Unlike previous years, there is no distinction between long and short talks. Needless to say, reviewing about 2,300 papers is a tremendous effort. The Program Committee did a thorough and highly professional job. Every paper received at least three independent reviews, which were provided by members of the program committee (PC). The review process was overseen by at least one senior program committee (SPC) member and by an area chair (AC). During the review process, author feedback was taken into account for the final discussion. When necessary, additional reviews were obtained.

In addition to the contributed technical program, we also have several invited talks and tracks. This year, we introduced a new category of Early Career Spotlight talks. These talks are aimed at providing an ac-

cessible introduction to the research directions of some of the most active early career researchers in all representative areas of AI. This track is in keeping with our goal of giving IJCAI attendees an integrated snapshot of the whole of AI (something that IJCAI is uniquely suited to do). We also have conference invited talks given by Wolfram Burgard (EurAI speaker), Jonathan Gratch, James A. Hendler, Rob Holte, Kevin Leyton-Brown, Sheila McIlraith, and David Silver. These talks cover a broad range of areas at the forefront of current research and point towards future directions of AI.

Finally we have talks from four AI researchers being honored for their research accomplishments: Michael I. Jordan, winner of the IJCAI-16 Award for Research Excellence, Moshe Tennenholtz, winner of the IJCAI-16 John McCarthy Award, and Percy Liang, winner of the IJCAI-16 Computers and Thought Award. We also have an award talk by the recipient of the IJCAI-15 Award for Research Excellence, Barbara Grosz. These award talks are given within an “AI Festival” on the afternoon of the last day of the conference and are open to the public. There will also be a short talk by Erik Sandewall, the winner of the Donald E. Walker Distinguished Service Award, at the conference opening.

A conference the size of IJCAI needs a tremendous effort by many people. First of all, we want to thank everyone involved in the reviewing process, 1605 program committee members who provided the initial reviews of the 2294 papers, 357 senior program committee members who facilitated discussion to reach a decision, and 44 area chairs who collated the decisions and made recommendations to the program chair. We would like to especially thank Evgeniy Gabrilovich and Mausam for coordinating the AI and Web technical track, Biplav Srivastava and Gita Sukthankar for organizing the Workshop track, Esra Erdem and Yevgeniy Vorobeychik for organizing the Tutorials track, Michael Thielscher and Carmel Domshlak for organizing the Sister Conference Best Paper Track, Maria Gini, Eric Eaton and Min Zhang for organizing the Doctoral Consortium, and Carlos Linares and Hankz Hankui Zhuo for organizing the Demo track. We also thank Satya Gautam Vadlamudi for his critical help with the review process and the program schedule. We also thank the PhD student volunteers, Sailik Sengupta, Lydia Manikonda and Tathagata Chakraborti for their substantial help during the review period.

The IJCAI-2016 local arrangements team chaired by Ernest Davis did a terrific job in organizing this event. Many thanks to Ernie and his entire team consisting of David Elson, Marco Maratea, Wenliang Zhong (Sponsorship), Heng Ji (Finance), Samantha Kleinberg (Exhibitors), Smaranda Muresan, Chirag Shah, Yang Yu (Publicity), Andrew Rosenberg (Volunteers), Ansaaf Salleb-Aouissi, Sailik Sengupta (Website Development), Rosario Uceda-Sosa (Industry day), and Changhe Yuan (Colocation).

We also thank the AAAI team under the guidance of Carol Hamilton for taking care of a substantial part of the conference organization in the usual highly professional way. Thanks also to Francisco Cruz Mencia (alias Tito) who managed to change the registration system while registration was open to adjust the system to our needs. Special thanks go to Vesna Sabljakovic-Fritz, the IJCAI Executive Secretary. She is IJCAI's living memory, and we would have been completely helpless without her advice during the last few years.

Needless to say there would be no conference without submissions. So last but not least we wish to thank all authors of submitted technical papers, workshop and tutorial proposals, demos and exhibitions. Your contributions are the heart of this conference, and if the conference is successful, then it is to your merit.

– *Subbarao Kambhampati* (Program Chair)

– *Gerhard Brewka* (Conference Chair)