



Conference Reports

Louise A. Dennis (University of Manchester; louise.dennis@manchester.ac.uk)

DOI: [10.1145/3594707.3594709](https://doi.org/10.1145/3594707.3594709)

This section is compiled from reports of recent events sponsored or run in cooperation with ACM SIGAI. In general these reports were written and submitted by the conference organisers.

AIMLSystems

Bangalore, India, 10/12/2022-10/15/2022
<https://www.aimlsystems.org>

AIMLSystems is a new conference that targets the research in the intersection of Systems Engineering and Artificial Intelligence and Machine Learning techniques. Through this conference, we plan to examine how immense strides in AI/ML techniques are made possible through advances in the computational systems and how the use of AI/ML can help in the data-driven explorations of the design space of the computational systems. We also investigate how new breeds of AI/ML systems enable new forms of socio-techno-economic systems and they in turn generate new requirements for research in AI/ML techniques.

This conference series is an initiative of the COMSNETS Association, a not-for-profit organization, which has organized the prestigious COMSNETS conference every year since 2009. ACM has awarded it the in-cooperation status and several top-notch institutions are its patrons.

AIMLSystems 2022 had seven outstanding Keynote speakers from across the globe. The high quality conference was held in-cooperation with ACM, ACM SIGAI, ACM SIGMOD, ACM SIGKDD. The patrons of the second edition of the conference were MINRO, Amazon, Amazon Alexa, Intuit, Razorpay, Golek,

The keynote speakers were.

- Carlos Guestrin, Stanford University, USA. How can you trust machine learning?
- Cynthia Rudin, Duke University, USA. Do

Simpler Machine Learning Models Exist and How Can We Find Them?

- Max Welling, University of Amsterdam & Microsoft Research, Netherlands. The PDE Prior for Deep Learning
- Nikko Strom, Amazon, USA. Edge Computing in Alexa
- Partha Pratim Talukdar, IISc Bangalore & Google Research, India. Scaling Natural Language Processing for the Next Billion Users
- Sunita Sarawagi, IIT Bombay, India. Natural Language Interfaces to Database Systems: the deep learning way and the challenges therein
- Thorsten Joachims, Cornell University, USA. Beyond Engagement: Optimizing the Long-Term Sustainability of Online Platforms

Industry keynotes:

- Debdoot Mukherjee, Head of AI, Meesho. Riding the Flywheel of Recommender Systems
- Girish Nathan, American Physical Society, Society of Exploration Geophysicist. Machine Learning in Fintech
- Ramesh Nallapati, Principal Applied Scientist, Amazon Web Services. Using AI to Accelerate Code Development
- Vignesh Subrahmaniam, Principal Data Scientist, Intuit. Automated Tax Notice Resolution

The Best Paper Award went to *Hetero-Rec: Optimal Deployment of Embeddings for High-Speed Recommendations* Chinmay N Mahajan (TCS Research); Ashwin Krishnan (TCS Research); Manoj Nambiar (TCS Research); Rekha Singhal (TCS Research)

The Best Doctoral Symposium Award went to *Data efficient class incremental learning* Jayateja Kalla and Soma Biswas (IISc Bangalore)

Proceedings can be found in the ACM Digital Library.

Equity and Access in Algorithms, Mechanisms and Optimization (EAAMO '22)

*George Mason University, VA, USA,
10/06/2022-10/09/2022*

<https://eaamo.org>

The second Association for Computing Machinery (ACM) conference on Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO '22) took place from October 6, 2022 to October 9, 2022 at George Mason University (GMU) in Arlington, VA, USA. This was the first in-person iteration of the EAAMO conference series after the virtual launch at EAAMO '21. This year's conference highlighted work where techniques from algorithms, optimization, and mechanism design, along with insights from the social sciences and humanistic studies tackle two goals: 1) improving equity and access to opportunity for historically disadvantaged and underserved communities and 2) helping identify ways in which algorithmic systems can create and perpetuate inequality. The conference is legally and financially sponsored by ACM Special Interest Groups on Artificial Intelligence (ACM SIGAI) and on Economics and Computation (ACM SIGecom), and has received financial support from the Alfred P. Sloan Foundation, MacArthur Foundation, and the Public Interest Technology University Network (PIT-UN).

We received over 150 submissions for publication from over 20 countries around the world and across fields, spanning authorship from researchers, policymakers, as well as other domain experts and professionals. All contributors were united by their interest in improving equity and developing solutions for problems in a variety of application domains such as education, labor, environment, healthcare, algorithmic fairness, and digital platforms. Due to its interdisciplinary nature, the conference attracted a very diverse and large group of members with backgrounds in computer science, AI, operations research, economics, public policy, and humanities, while a great number of papers combined methodologies and insights from multiple fields. Each contributed paper was rigorously peer-reviewed by members of a program committee who were chosen from fields related to the topics of the conference. Out of all submissions, 94

submissions were accepted as oral or poster presentations.

From the accepted papers, 19 were accepted in the second volume of the archival track of the conference: the 2022 Proceedings of EAAMO '22: Equity and Access in Algorithms, Mechanisms, and Optimization published by the ACM. We also gave awards in the following categories: Best Paper, Best Paper with a Student Presenter, and New Horizons, as described below.

Each of the four days of the conference featured either keynote talks or panel discussions alongside thematically related sessions. Our keynote talks addressed key themes for the conference: digital and data markets, algorithms for societal allocation, sustainability, and past and present inequality. The thematically-related multi-disciplinary sessions for contributed talks represented the wide range of topics and application domains of interest to the conference goals, the combination of novel and diverse methodologies as well as the strong connections of many papers to policy design: Participation, Allocation under constraints, Government Regulation & Audits, Quantitative social science and conceptual frameworks, Service Delivery & Incentives, Algorithms for Allocation, Computational Social Choice, Algorithmic Fairness and Documentation, Policy & Practice, Human Factors, and Allocation in Social Services.

The conference had more than 140 in-person participants from over 13 countries as well as over 70 virtual participants from over 23 countries. It featured a single-track program including three keynote talks, one panel discussion, 39 contributed talks, and 55 poster presentations across various fields, in addition to a doctoral consortium as well as several networking and mentoring opportunities. The virtual modality of the conference was hosted on the Hopin platform for keynote talks, invited talks, panel discussions, and various virtual social and mentorship events. The conference succeeded in bridging research and practice by intentionally bringing together researchers, policymakers, and practitioners in various government and non-government organizations, community organizations, and industry. To this end, the conference had a "Research" submission track and a "Policy and Practice" sub-

mission track. Overall, almost forty percent of non-students registrations were outside of academia. The conference provided an international forum for presenting research papers, problem pitches, survey and position papers, new datasets, and software demonstrations towards the goal of bridging research and practice. Our keynote speakers spanned practice and research disciplines from Computer Science and Operations Research, to Economics and Public Health. The conference also featured a panel discussion on “Opportunities and Barriers in Bridging Research and Practice” featuring experts in public policy and development economics.

We were fortunate to benefit from a variety of keynote speakers, all joined thematically by related research on marginalized populations. Our keynote speakers included:

- Marcela Alsan (Professor of Public Policy, Harvard Kennedy School). Representation and extrapolation: Evidence from clinical trials
- Sello Mokwena (Professor of Computer Science, University of Limpopo). Factors influencing low adoption rate of technologies in developing countries
- Karen Smilowitz (James N. and Margie M. Krebs Professor in Industrial Engineering and Management Sciences, Northwestern University). Emerging trends and new research directions in volunteer management

In addition, the conference program included a panel of experts working on internal and external obstacles that exist between research and practice, and more importantly how to overcome them.

Panel Theme: Opportunities and Barriers in Bridging Research and Practice

Moderator: Sera Linardi, Associate Professor, Graduate School of Public & International Affairs, University of Pittsburgh

Panelists: • Emanuela Galasso, Senior Economist in the Development Research Group (Poverty and Inequality Team) at the World Bank.

- Rebecca Johnson, Assistant Professor at McCourt School of Public Policy, Georgetown University.

- Sello Mokwena, University of Limpopo, South Africa

Best Paper Award

Related to the conference theme of bridging research and policy, the award-winning paper highlighted new research directions for policy-oriented work. The winning paper was:

- Bias, Consistency, and Partisanship in U.S. Asylum Cases: A Machine Learning Analysis of Extraneous Factors in Immigration Court Decisions Vyoma Raman, Catherine Vera and C.J. Manna

Best Paper with a Student Presenter Award

The Best Student Paper Award was awarded to two papers with student leading authors:

- Improving Access to Housing and Supportive Services for Runaway and Homeless Youth: Reducing Vulnerability to Human Trafficking in New York City. Yaren Bilge Kaya, Kayse Maass, Geri Dimas, Renata Konrad, Andrew Trapp and Meredith Dank
- On Meritocracy in Optimal Set Selection. Thomas Kleine Buening, Meirav Segal, Debabrota Basu, Anne-Marie George and Christos Dimitrakakis

New Horizons Awards

The New Horizons Award highlights promising, ongoing work in an emerging area of research:

- Dimensions of Diversity in Human Perceptions of Algorithmic Fairness Nina Grgić-Hlača, Gabriel Lima, Adrian Weller and Elissa M. Redmiles

Website & Web Content: Conference-related content will be stored on the eaamo@org domain. The success of EAAMO '22 conference relied on the contributions of many individuals and organizations. We thank all authors who submitted work to the conference and we are grateful for their high quality submissions. We are grateful to our sponsors, the ACM SIGecom and SIGAI, for sponsoring the conference for the second year in a row. We are particularly grateful to our funders, the Sloan Foundation, MacArthur Foundation, and the Public Interest Technology University Network

(PIT-UN), whose support has been essential in funding under-represented groups to participate in the conference and in lowering registration fees in general to promote inclusivity. In short, our funders' support has been used for travel grants for students coming from the Global South, registration fee waivers, and speaker honoraria, which has contributed to a diverse and multi-disciplinary program. Finally, no conference will succeed without the strong support of its participants. We would like to thank all the authors and attendees for participating in the conference.

14th International Joint Conference on Knowledge Discovery, Knowledge Engineering and Knowledge Management(IC3K '22)

Valletta, Malta, 10/24/2022-10/26/2022
<https://ic3k.scitevents.org?y=2022>

IC3K 2022 was held in Valletta, Malta, from October 24 to 26, 2022. It was sponsored by the Institute for Systems and Technologies of Information, Control and Communication (IN-STICC). IC3K 2022 was also organized in cooperation with the ACM Special Interest Group on Artificial Intelligence.

IC3K received 127 paper submissions from 39 countries. To evaluate each submission, a double-blind paper review was performed by the Program Committee. After a stringent selection process, 22.83% of the papers were published and presented as full papers, i.e. completed work (12 pages/25' oral presentation).

In addition to the presentation sessions, IC3K 2022 included outstanding keynote lectures, which are relevant to today's lines of research and technical innovation. These talks were presented by internationally distinguished researchers, namely:

- Bart Verheijen, GuruScan, Netherlands: International Expert Mapping
- Giancarlo Guizzardi, Free University of Bolzano-Bozen, Italy and University of Twente, Netherlands: Relations, Events, and Explanation
- Catholijn Jonker, Delft University of Technology, Netherlands: Self-Reflective Hybrid In-

telligence: Combining Human with Artificial Intelligence and Logic

- Rudolf Kruse, Otto von Guericke University Magdeburg, Germany: Probabilistic Graphical Models: On Reasoning, Learning, and Revision

Additionally, a "Best Paper Award", "Best Student Paper Award" and "Best Poster Award" were conferred during the conference. More information can be found at: <https://ic3k.scitevents.org/PreviousAwards.aspx>

14th International Joint Conference on Computational Intelligence (IJCCI '22)

Valletta, Malta 10/24/2022-10/26/2022
<https://ijcci.scitevents.org?y=2022>

IJCCI 2022 was held in Valletta, Malta, from October 24 to 26, 2022. It was sponsored by the Institute for Systems and Technologies of Information, Control and Communication (IN-STICC). IJCCI 2022 was also organized in cooperation with the ACM Special Interest Group on Artificial Intelligence, International Neural Network Society and European Society for Fuzzy Logic and Technology.

IJCCI received 57 paper submissions from 24 countries. To evaluate each submission, a double-blind paper review was performed by the Program Committee. After a stringent selection process, 35.09% of the papers were published and presented as full papers, i.e. completed work (12 pages/25' oral presentation).

In addition to the presentation sessions, IJCCI 2022 included outstanding keynote lectures, which are relevant to today's lines of research and technical innovation. These talks were presented by internationally distinguished researchers, namely:

- Abir Hussain, University of Sharjah, United Arab Emirates: Data Science and Industrial Applications
- Gusz Eiben, Vrije Universiteit Amsterdam, Netherlands: Evolving Embodied Intelligence
- Anna Wilbik, Maastricht University, Netherlands: Federated Learning: A Hype or a Trend?

Additionally, a "Best Paper Award", "Best Student Paper Award" and "Best Poster Award" were conferred during the conference. More information can be found at: <https://ijcci.scitevents.org/PreviousAwards.aspx>



Louise Dennis is the Conference Coordination Officer for ACM SIGAI, and a faculty member at the University of Manchester. Her research is in Verification of Autonomous Systems, Cognitive Agents and Machine Ethics. Contact her

at louise.dennis@manchester.ac.uk.
