

Conference Reports

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One of SIGAI's missions is to promote and support AI-related conferences. Here, we report on the proceedings of recent events sponsored or run in cooperation with ACM SIGAI, up until the end of January 2025. Reports from February 2025 onwards will be published in the next issue. Members receive reduced registration rates to all affiliated conferences. These reports are based on submissions by the conference organisers.



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7th AAAI/ACM Conference on Artificial Intelligence, Ethics, and Society

San José, USA, October 21-23 2024

<https://www.aies-conference.com/2024/>

The AIES conference aims to encourage talented scholars from Computer Science, Law and Policy, the Social Sciences, Ethics, Philosophy, and related fields to discuss the best work related to the intersection of AI, Ethics, and Society. The conference also explicitly welcomes disciplinary experts who are newer to this topic, and see ways to break new ground in their own fields by thinking about AI.

Keynote Lectures

- Danah Boyd, Microsoft Research, Georgetown University
- David Danks, University of California San Diego

- Diyi Yang, Stanford University

Best Paper

Michael Feffer, Anusha Sinha, Wesley H. Deng, Zachary C. Lipton and Hoda Heidari: *Red-Teaming for Generative AI: Silver Bullet or Security Theater?*

Best Paper Runner-Up

Arianna Manzini, Geoff Keeling, Lize Alberts, Shannon Vallor, Meredith Ringel Morris and Iason Gabriel: *Beyond Interaction: Investigating the Appropriateness of Human-AI Assistant Relationships*

Best Student Paper

Andrea W Wen-Yi, Kathryn Adamson, Nathalie Greenfield, Rachel Goldberg, Sandra Babcock, David Mimno and Allison Koenecke: *Automate or Assist? The Role of Computational Models in Identifying Gendered Discourse in US Capital Trial Transcripts*

Best Student Paper Runner-Up

Rui-Jie Yew, Lucy Qin and Suresh Venkatasubramanian: *You Still See Me: How Data Protection Supports the Architecture of AI Surveillance*

The Association for the Advancement of Artificial Intelligence and the Association for Computing Machinery organised AIES 2024, and it was hosted by the Markkula Center for Applied Ethics at Santa Clara University. The conference was sponsored by Google DeepMind, Google, Google Salesforce, Sony AI, IBM, eBay, and JPMorgan Chase.

AIES 2024 also featured a student program with one-on-one meetings and lunches with senior scholar mentors, as well as the opportunity to present dissertation research in posters alongside main track posters. The student participants from all over the world expressed very positive reactions to the quality of the program and the resources provided. The student track was sponsored by the ACM SIG on Artificial Intelligence and the National Science Foundation.

The proceedings of AIES 2024 are here: <https://ojs.aaai.org/index.php/AIES/issue/view/609>

AIES 2025 will take place in Madrid, Spain, October 20-22.

39th IEEE/ACM International Conference Automated Software Engineering

Sacramento, USA, October 27 - November 1, 2024

<https://conf.researchr.org/home/ase-2024>

ASE is the premier research forum for Automated Software Engineering. Each year, it brings together researchers and practitioners from academia and industry to discuss foundations,

techniques, and tools for automating the analysis, design, implementation, testing, and maintenance of large software systems.

Keynote Lectures

The conference featured three excellent keynote talks, all dealing with different aspects of generative models in software engineering. Prof. Koushik Sen (UC Berkeley, US) talked about how LLMs affected symbolic execution and test generation for smart contracts. Prof. Corina Pasareanu (CMU, US) presented how multi-model perception models such as Vision Language Models can assist formal analysis and run-time monitoring of requirements. Finally, Dr. Chales Sutton (Google Deepmind, University of Edinburgh) gave a talk which explored the extent to which LLMs can "understand", rather than generate, code.

Distinguished Paper Awards

- Xihao Zhang, Yi Song, Xiaoyuan Xie, Qi Xin and Chenliang Xing: *Do not neglect what's on your hands: localizing software faults with exception trigger stream*
- Zongze Jiang, Ming Wen, Jialun Cao, Xuanhua Shi and Hai Jin: *Towards Understanding the Effectiveness of Large Language Models on Directed Test Input Generation*
- Zifan Xie, Ming Wen, Tinghan Li, Yiding Zhu, Qinsheng Hou and Hai Jin: *How Does Code Optimization Impact Third-party Library Detection for Android Applications?*
- Chuan Yan, Mark Huasong Meng, Lihuo Wan, Tian Yang Ooi, Ruomai Ren and Guangdong Bai: *Exploring ChatGPT App Ecosystem: Distribution, Deployment and Security*
- Yin Wang, Ming Fan, Hao Zhou, Haijun Wang, Wuxia Jin, Jiajia Li, Wenbo Chen, Shijie Li, Yu Zhang, Deqiang Han and Ting Liu: *MiniChecker: Detecting Data Privacy Risk of Abusive Permission Request Behavior in Mini-Programs*
- Chengpeng Li, Abdelrahman Baz and August Shi: *Reducing Test Runtime by Transforming Test Fixtures*
- Shiwei Feng, Yapeng Ye, Qingkai Shi, Zhiyuan Cheng, Xiangzhe Xu, Siyuan Cheng, Hongjun Choi and Xiangyu Zhang: *ROCAS: Root Cause Analysis of Autonomous Driving Accidents via Cyber-Physical Co-mutation*
- Huan Xie, Yan Lei, Maojin Li, Meng Yan and Sheng Zhang: *Combining Coverage and Expert Features with Semantic Representation for Coincidental Correctness Detection*
- Elvan Kula, Arie van Deursen and Georgios Gousios: *Context-Aware Automated Sprint Plan Generation for Agile Software Development*
- Jiuang Zhao, Zitian Yang, Li Zhang, Xiaoli Lian, Donghao Yang and Xin Tan: *DRMiner: Extracting Latent Design Rationale from Jira Issue Logs*
- Muhammad A. A. Pirzada, Giles Reger, Ahmed Bhayat and Lucas C. Cordeiro: *LLM-Generated Invariants for Bounded Model Checking Without Loop Unrolling*
- Yiheng Xiong, Ting Su, Jue Wang, Jingling Sun, Geguang Pu and Zhendong Su: *General and Practical Property-based Testing for Android Apps*
- Guangyuan Wu, Weining Cao, Yuan Yao, Hengfeng Wei, Taolue Chen and Xiaoxing Ma: *LLM Meets Bounded Model Checking: Neuro-symbolic Loop Invariant Inference*
- Huan Zhang, Wei Cheng, Yuhan Wu and Wei Hu: *A Pair Programming Framework for Code Generation via Multi-Plan Exploration and Feedback-Driven Refinement*

- Shuncheng Tang, Zhenya Zhang, Jixiang Zhou, Lei Wang, Yuan Zhou and Yinxing Xue: *LeGEND: A Top-Down Approach to Scenario Generation of Autonomous Driving Systems Assisted by Large Language Models*

UC Davis California, ByteDance, and Google sponsored ASE 2024. The conference was also supported by the ACM SIGAI and the ACM SIGSoft.

The proceedings of ASE 2024 are in the ACM digital library: <https://dl.acm.org/doi/proceedings/10.1145/3691620>

ASE 2025 will take place in Seoul, South Korea, November 16-20.

4th ACM Conference on Equity and Access in Algorithms, Mechanisms, and Optimization

San Luis Potosí, Mexico, October 29-31, 2024

<https://conference2024.eaamo.org/>

EAAMO highlights work where techniques from algorithms, optimization, and mechanism design, along with insights from the social sciences and humanistic studies, can help improve equity and access to opportunity for historically disadvantaged and underserved communities.

Keynote Lectures

- Alessandra Fogli, Federal Reserve Bank of Minneapolis: *Beliefs, Social Context, and Macro Outcomes*
- Irene Lo, Stanford University: *Mechanisms, Optimization, and Education Policy*.

Best Paper Award

Johann Gaebler and Sharad Goel: *A Simple, Statistically Robust Test of Discrimination*

Best Student Paper

Marios Mertzaniadis, Alexandros Psomas and Paritosh Verma: *Automating Food Drop: The Power of Two Choices for Dynamic and Fair Food*

The conference also featured a month-long Social Hackathon, which looked at the impact of environmental risk factors on breast cancer in Mexico; a Doctoral Consortium, which offered mentoring and skill-building for students; and a panel with the Jamal Poverty Action Lab, connecting researchers and policymakers. It also included an EAAMO Bridges session, where participants explored strategies for building a research community that centers the perspectives and interests of marginalized groups in the design of algorithmic and resource allocation systems.

ACM SIGecom and ACM SIG on Artificial Intelligence sponsored EAAMO 2024. The following organisations co-sponsored the conference: *Columbia University*, the *University of Pittsburgh Center for International Studies and Responsible Data Science*, the *Artificial Intelligence Journal*, *Econmachina*, *COPOCYT (San Luis Potosí Council of Science and Technology)*, *Santander Universia*, *Mexican National Network of Councils and State Organizations of Science and Technology*, an *Luis Potosí Municipal Government*, *San Luis Potosí State Government*, *Autonomous University of San Luis Potosí*, and the *San Luis Potosí Institute of Scientific Research and Technology*. The conference was also supported by the *Association for Computing Machinery*, the *Harvard David Rockefeller Center for Latin American Studies*, and the *Harvard SEAS Office for Diversity, Inclusion and Belonging*.

ACM EAAMO 2025 will take place in Pittsburgh, USA, November 5-7.

2024 International Conference on Artificial Intelligence and Future Education

Shanghai, China, November 1-2 2024

<https://www.icaife.net/>

ICAIFE is a pioneering platform, uniting scholars, educators, researchers, and industry leaders from around the globe to explore the transformative role of Artificial Intelligence in shaping future educational paradigms.

Keynote Speakers

- Prof. Qinghua Zheng, Tongji University, China
- Prof. Hui Wang, Beijing Normal University, China
- Prof. Bin Zhou, The Second Affiliated Middle School of East China Normal University, China
- Liu Yuxiang, Secretary of the Party Committee and President of Shanghai Education Examination Institute
- Prof. Weimin Zheng, Tsinghua University, China
- Prof. Xingao Gong, Guangdong Technion-Israel Institute of Technology, China
- Prof. Han Yu, Education Examination Institute, Ministry of Education, China
- Prof. Yihui Zheng, Shanghai Open University, China

The proceedings of iCAIFE 2024 are in the ACM Digital Library: <https://dl.acm.org/doi/proceedings/10.1145/3708394?tocHeading=heading3>

ICAIFE 2025 will take place in Shanghai, China, October 24-26.

2nd International Conference on Mathematics and Machine Learning

Nanjing University, China, November 8-10, 2024

<https://www.icmml.org/>

ICMML is an international forum for academics, scientists, and engineers in the fields of Mathematics and Machine Learning to exchange ideas, share expertise, and discuss the challenges and future possibilities in their specialisms.

Keynote Lectures

- Wanyang Dai, Nanjing University, China: *3D AI and Spatial Generative AI via Feedback Control Strengthened Quantum Transformer*
- Lin Chen, Sun Yat-sen University, China: *On Batching Task Scheduling: Theoretical Foundation and Algorithm Design*
- Lazim Abdullah, Universiti Malaysia Terengganu, Malaysia: *A Combined Decision-Making Analysis Under Single Valued Neutrosophic Set for Selecting Knowledge Management Strategy*

Nanjing University sponsored ICMML 2024. The proceedings of ICMML are in the ACM digital library: <https://dl.acm.org/doi/proceedings/10.1145/3708360>

ICMML 2025 will take place in Nanjing, China, November 14-16.

16th International Joint Conference on Knowledge Discovery, Knowledge Engineering and Knowledge Management

Porto, Portugal, November 17-19 2024

<https://ic3k.scitevents.org/>

IC3K consists of three co-located conferences, in the areas of Knowledge Discovery, Knowledge Engineering, and Knowledge Management. It attracts researchers, engineers, and practitioners in these fields.

Keynote Lectures

- Nirmalie Wiratunga, Robert Gordon University, Aberdeen, United Kingdom: *Intelligent Reuse of Explanation Experiences: The Role of Case-Based Reasoning in Promoting Best Practice in Explainable AI*
- João Gama, University of Porto, Portugal: *Recent Advances in Learning from Data Streams*
- Carlo Sansone, University of Naples Federico II, Italy: *Multimodal Deep Learning in Medical Imaging*

Best Paper Award

Colin Daly and Lucy Hederman: *Learning to Rank for Query Auto-Complete with Language Modelling in Enterprise Search*

Best Student Paper Award

Elona Shatri and György Fazekas: *Knowledge Discovery in Optical Music Recognition: Enhancing Information Retrieval with Instance Segmentation*

Best Poster Award

Mahran Jazi and Irad Ben-Gal: *Federated Learning for XSS Detection: A Privacy-Preserving Approach*

Honorable Mention

Ahmed Qarqour, Sahil-Jai Arora, Gernot Heisenberg, Markus Rabe and Tobias Kleinert: *Utilizing Data Analysis for Optimized Determination of the Current Operational State of Heating Systems*

The *Institute for Systems and Technologies of Information, Control and Communication* sponsored IC3K 2024. The conference was also organized in cooperation with the *ACM SIG on Artificial Intelligence*, the *Association for the Advancement of Artificial Intelligence*, and the *Portuguese Association for Artificial Intelligence*.

IC3K 2025 will take place in Marbella, Spain, 22-24 October.

21st International Conference on Informatics in Control, Automation and Robotics

Porto, Portugal, November 18-20, 2024

<https://icinco.scitevents.org>

ICINCO brings together researchers, engineers and practitioners interested in the application of informatics to Control, Automation and Robotics. The conference covers topics related to Intelligent Control Systems, Optimization, Robotics, Automation, Signal Processing, Sensors, Systems Modelling and Control, and Industrial Informatics.

Keynote Lectures

- John Charles Krumm, University of Southern California, United States: *Personal Data Privacy: Especially Location*
- Antonella Ferrara, University of Pavia, Italy: *Control of Road Traffic Systems: A Multi-Scale Perspective*
- Vladimír Kucera, Czech Technical University in Prague, Czech Republic: *Youla-Kučera Parameterization: Theory and Applications*

Best Paper Award

Duarte Branco, Rui Coutinho, Armando Sousa and Filipe Dos Santos: *Subsurface Metallic Object Detection Using GPR Data and YOLOv8 Based Image Segmentation*

Best Student Paper Award

Emmanuel Alao, Lounis Adouane and Philippe Martinet: *Multi-Risk Assessment and Management in the Presence of Personal Light Electric Vehicles*

Best Poster Award

Elias August, Sigurdur Hafstein, Jacopo Piccini, Stefania Andersen and Anna Bavarsad: *Application of the Schur Complement in Sum of Squares Optimisation*

Best Industrial Paper Award

Assia Belbachir, Antonio M. Ortiz, Erik T. Hauge, Ahmed Nabil Belbachir, Giusy Bonanno, Emanuele Ciccia and Giorgio Felling: *Drone Technology for Efficient Warehouse Product Localization*

The *Institute for Systems and Technologies of Information, Control and Communication* sponsored ICINCO 2025, and it was technically co-sponsored by *IEEE SMC - TC on Evolving Intelligent Systems and International Federation of Automatic Control*. ICINCO 2024 was also organized in cooperation with the *ACM SIG on Artificial Intelligence*, the *Association for the Advancement of Artificial Intelligence*, the *Portuguese Association for Artificial Intelligence*, and the *International Neural Network Society*.

ICINCO 2025 will take place in Marbella, Spain, October 20-22.

1st International Conference on Explainable AI for Neural and Symbolic Methods

Porto, Portugal, November 20-22 2024

<https://explains.scitevents.org/>

EXPLAINS provides a space for knowledge exchange between different communities in AI, which are all developing explainable AI with different definitions, evaluation metrics, motivations and results. This is important, as in the future, people will collaborate more and more with machines to solve complex problems using AI techniques. Such a collaboration requires adequate communication, trust, clarity and understanding. Explainable AI aims to address such challenges by combining the best of symbolic AI and Machine Learning including neural models, evolutionary computing and fuzzy systems.

Keynote Lectures

- Tome Eftimov, Jožef Stefan Institute, Slovenia: *Trustworthy Benchmarking for Black-Box Single-Objective Optimization*
- Rita P. Ribeiro, University of Porto, Portugal: *Predictive Maintenance for Industry 4.0 & 5.0*
- Gabriela Ochoa, University of Stirling, United Kingdom: *Search Trajectories Illuminated*

The *Institute for Systems and Technologies of Information, Control and Communication* sponsored EXPLAINS 2024. The conference was also organized in cooperation with the *ACM SIG on Artificial Intelligence*, the *Portuguese Association for Artificial Intelligence*, and the *Associação Portuguesa de Reconhecimento de Padrões*.

EXPLAINS 2025 will take place in Marbella, Spain, October 22-24.

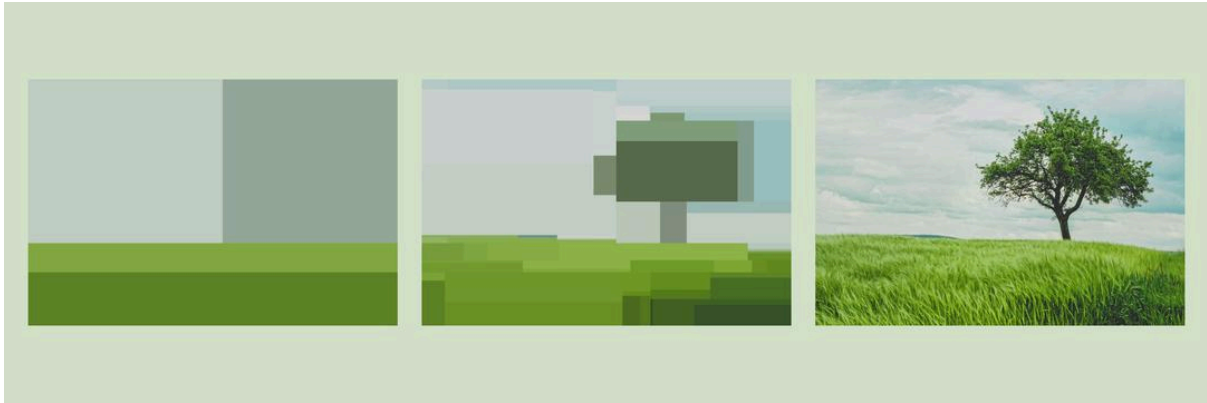


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16th International Joint Conference on Computational Intelligence

Porto, Portugal, November 20-22, 2024

<https://ijcci.scitevents.org/>

IJCCI brings together researchers, engineers and practitioners in the areas of Fuzzy Computation, Evolutionary Computation and Neural Computation. IJCCI is composed of three co-located conferences, each specialized in at least one of the aforementioned main knowledge areas.

Keynote Lectures

- Tome Eftimov, Jožef Stefan Institute, Slovenia: *Trustworthy Benchmarking for Black-Box Single-Objective Optimization*
- Rita P. Ribeiro, University of Porto, Portugal: *Predictive Maintenance for Industry 4.0 & 5.0*
- Gabriela Ochoa, University of Stirling, United Kingdom: *Search Trajectories Illuminated*

Best Paper Award

Jacob de Nobel, Diederick Vermetten, Thomas H. W. Bäck and Anna V. Kononova: *Sampling in CMA-ES: Low Numbers of Low Discrepancy Points*

Honorable Mention

Michele Vannucci, Satchit Chatterji and Babak H. Kargar: *Testing Emergent Bilateral Symmetry in Evolvable Robots with Vision*

Best Student Paper Award

Seyedamirhossein Salehiamiri, Richard Allmendinger and Arijit De: *Real-Time IoMT-driven Optimisation for Large-Scale Home Health Care Planning*

Honorable Mention

Quentin Vacher, Nicolas Beuve, Paul Allaire, Thibaut Marty, Mickaël Dardaillon and Karol

Desnos: *Hybrid Genetic Programming and Deep Reinforcement Learning for Low-Complexity Robot Arm Trajectory Planning*

Best Poster Award

Younes Boukacem, Hatem M. Abdelmoumen, Hodhaifa Benouaklil, Samy Ghebache, Boualem Hamroune, Mohammed Tirichine, Nassim Ameur and Malika Bessedik: *L-SAGA: A Learning Hyper-Heuristic Architecture for the Permutation Flow-Shop Problem*

The *Institute for Systems and Technologies of Information, Control and Communication* sponsored IJCCI 2024. The conference was also organized in cooperation with the *ACM SIG on Artificial Intelligence*, the *Association for the Advancement of Artificial Intelligence*, the *World Federation on Soft Computing*, the *International Neural Network Society*, and the *Portuguese Association for Artificial Intelligence*.

IJCCI 2025 will take place in Marbella, Spain, October 22-24.

2nd International Conference on Information Education and Artificial Intelligence

Kaifeng, China, December 20-22, 2024

www.ic-ieai.org

ICIEAI focuses on how AI can shape education, the advancement of the science and engineering research behind AI-assisted interactive learning systems, and the promotion of the widespread adoption of AI in education.

Keynote Lectures

- Benjamin W. Wah, The Chinese University of Hong Kong: *Objective Modeling of the Big-Data Problem On Perceptual Quality for Fast Interactive Multimedia Games*
- Shadiev Rustam, Zhejiang University: *Advancing Language and Culture Learning through VR: From Basic Immersion to AI-enhanced Multilingual Interaction and Content Engagement*
- Shuai Liu, Hunan Normal University: *Challenges in Classroom Behavior Recognition: Long-term Tracking and Tiny Behavior Recognition*
- Haozhe Jiang, Zhejiang University: *Thinking Styles, STEM Attitudes and Computational Thinking in The 21st Century*

ICIEAI is supported by the *ACM SIG in Artificial Intelligence* and the *South China Agricultural University*. The proceedings of ICIEAI are in the ACM digital library: <https://dl.acm.org/doi/proceedings/10.1145/3724504>

ICIEAI 2025 will take place in Guangzhou, China, December 12-14.

7th IEEE International Conference on Artificial Intelligence & eXtended and Virtual Reality

Lisbon, Portugal, January 27-29 2025

<https://aixvr.tecnico.ulisboa.pt/>

IEEE AIXVR brings together researchers and professionals across the spectrum of Artificial Intelligence, Augmented Reality, Mixed Reality, and Virtual Reality. This event serves as a global platform to foster collaboration between these diverse fields, facilitating the presentation of cutting-edge advancements, identifying emerging research avenues, and collectively shaping the future of these dynamic research domains.

Proceedings

There were two keynote speakers, one from each side of AI and XR.

- Anthony Steed: Head of the Virtual Environments and Computer Graphics group in the Department of Computer Science at University College London.
- Elisabeth André: Chair for Human-Centered Artificial Intelligence at Augsburg University

The program also featured 8 technical sessions, 9 thematic workshops, 2 special sessions, demo sessions and social events. Best full papers, short papers, and demos were awarded. The *IEEE Computer Society* sponsored IEEE AIXVR, with in-cooperation support from *ACM SIGAI*, *ACM In-Cooperation*, *ACM SIGGRAPH*, *ACM SIGCHI*, *Eurographics*, and the *Grupo Português Computação Gráfica Eurographics Portuguese Chapter*.

The proceedings of AIXVR 2025 can be found: <https://ieeexplore.ieee.org/xpl/conhome/10895984/proceeding>. IEEE AIXVR 2026 will take place in Osaka, Japan, January 26-28.

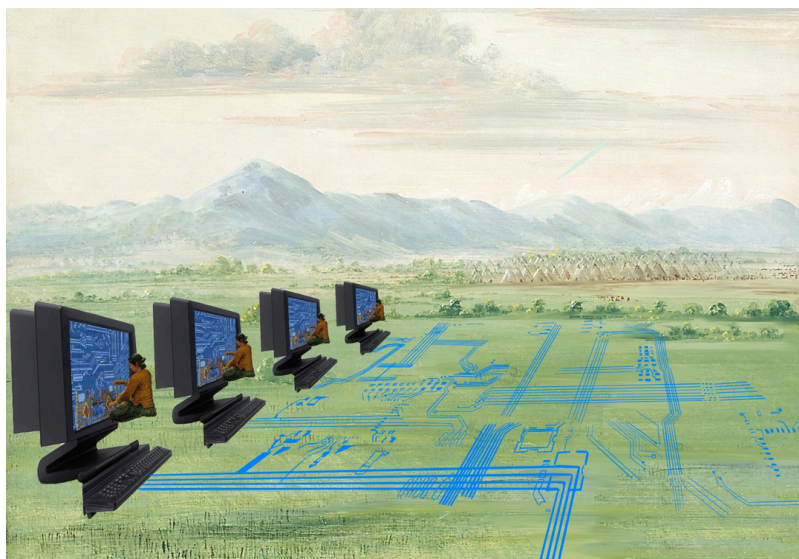


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Conference Statistics

Conference	Number of Participants	Number of Submissions	Number of Countries Submissions Were From	Percentage of Papers Accepted / %	Type of Review
ACM EAAMO 2024	203	113	19	23.0	-
AIES 2024	-	468	-	32.1	-
AixVR 2025	-	-	-	-	-
ASE 2024	430	557	-	26.4	-
EANMO 2024					
EXPLAINS 2024	23	19	13	26.3	Double-blind
IC3K 2024	151	175	47	21.1	Double-blind
ICAIFE 2024	500	-	-	-	-
ICIEAI 2024	70	-	-	-	-
ICINCO 2024	135	160	45	22.0	Double blind
ICMML 2024	30	-	-	-	-
IJCCI 2024	77	78	33	32.1	Double-blind