AIMLSystems 2023
The 3ʳᵈ International Conference on AI-ML Systems
An Initiative of the COMSNETS Association

The Chancery Pavilion, Residency Road, Bangalore, India
October 25-28, 2023

In-Cooperation With

Conference Website: **https://www.aimlsystems.org/2023/**
Paper Submission: **https://cmt3.research.microsoft.com/AIMLSystems2023/**

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CALL FOR PARTICIPATION

Submit your previously unpublished research on the intersection of AI/ML techniques and systems engineering for the Third edition AIMLSystems conference. Our focus is on the natural connections between these fields and their application to socio-economic systems. We specifically explore how AI/ML techniques benefit from computational systems research and how they can aid in the design of computational and socio-economic systems. Join us in discovering connections between diverse communities in Research, Industry & Applications.

TOPICS OF INTEREST

1. **Systems for AI/ML:** CPU/GPU architectures, specialised/embedded hardware, data-intensive systems, production deployment challenges, programming models/languages/abstractions, compilers/runtime, efficient data preparation/processing/visualisation, testing/debugging/monitoring, cloud computing, "as-a-service" options, tiny machine learning, embedded/edge AI, distributed/parallel learning algorithms, and MLOps.

2. **AI/ML for Systems:** AI/ML for VLSI and architecture design; AI/ML in compiler optimisation; AI/ML in data management - including database optimisations, virtualisation, etc.; AI/ML for networks - design of networks, load modelling, etc.; AI/ML for power management - green computing, power models, etc.; AI/ML for Cloud Computing; AI/ML for IOT

3. **AI ML Algorithms and Applications:** Deep Learning Architecture and applications, Computer Vision and Image processing, Natural language processing and understanding, Speech signal processing and Socio-Economic Systems, Fairness and biases of models, Explainability, transparency, and interpretability of AI systems Privacy, security, and ethics in AI. AI/ML for cyber-physical systems; Fairness, interpretability and explainability for ML applications; Privacy and security in AI/ML systems; Sustainability in AI/ML systems; Applications of AI/ML in financial systems.

IMPORTANT DATES

- Paper submissions due: **July 12, 2023**
- Author notifications: **August 30, 2023**
- Camera ready deadline: **September 20, 2023**
- Conference dates: **October 25-28, 2023**

AUTHOR INSTRUCTIONS

- Research papers must not exceed 8 pages, excluding appendix, acknowledgments and bibliography. Only electronic submissions in PDF format using the ACM sigconf template (see https://www.acm.org/publications/proceedings-template) will be considered.

- Papers can be submitted under any of the three main topics listed above. Authors are required to make a primary topic selection, with optional secondary topics for each paper. Number of papers accepted under each topic is not capped. We will accept all papers that meet the high quality and innovation levels required by the AIMLSystems conference. All papers that are accepted will appear in the proceedings.

- All accepted papers will be presented as posters at AIMLSystems 2023, but a select subset of them will be given a "conventional" (oral) presentation slot during the conference. However, all accepted papers will be treated equally in the conference proceedings, which are the persistent, archival record of the conference.