AIMLSystems 2021

The 1st International Conference on AI-ML-Systems

An Initiative of the COMSNETS Association

October 21-23, 2021
Bangalore, India | Hybrid Conference

https://www.aimlsystems.org/2021/
https://cmt3.research.microsoft.com/AIMLSystems2021/

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In-Cooperation With

CALL FOR PAPERS

AIMLSystems is a brand new conference targeting research in the intersection of AI/ML techniques and systems engineering. Through this conference we plan to bring out and highlight the natural connections between these two fields. Specifically we explore how immense strides in AI/ML techniques are made possible through computational systems research (e.g., improvements in CPU/GPU architectures, data-intensive infrastructure, communications etc.), how the use of AI/ML can help in the continuous and workload-driven design space exploration of computational systems (e.g., self-tuning databases, learning compiler optimizers, learnable network systems etc.) and, the use of AI/ML in the design of socio-economic systems such as public healthcare, and security. The goal is to bring together these diverse communities and elicit connections between them.

The conference is planned to be held in hybrid mode allowing both online and in-person participation.

Contributions are invited under Research, Industry & Applications, and Demonstration Tracks of the conference. Authors are encouraged to submit previously unpublished research at the intersection of computational / socio-economic systems and AI/ML.

TOPICS OF INTEREST

The areas of interest are broadly categorized into the following three streams:

1. Systems for AI/ML (e.g., CPU/GPU architectures for AI/ML; Embedded hardware for AI/ML workloads; Data intensive systems for efficient and distributed training; Challenges in production deployment of ML systems; Efficient model training, optimization and inference; Hardware efficient ML methods; Resource-constrained ML; etc.)

2. AI/ML for Systems (e.g., AI/ML for VLSI and architecture design; AI/ML in compiler optimization; AI/ML in data management - including database optimizations, virtualization, etc.; AI/ML for networks - design of networks, load modeling, etc.; AI/ML for power management - green computing, power models, etc.)

3. Applications of AI/ML in Socio-Economic Systems Design (e.g., Computational design and analysis of socio-economic systems; Fair and bias-free systems for social welfare, business platforms; Applications of AI/ML in the design, short-/long-term analysis of cyber-physical systems; Mechanism design for socio-economic systems; Applications of AI/ML in financial systems; etc.)

PAPER SUBMISSIONS

Research papers must not exceed 6 pages, including any appendix and bibliography. Only electronic submissions in PDF format will be considered. Page limits and formatting instructions for all remaining tracks will be announced on the conference website. Paper review will follow single-blind policy.

The manuscripts can be submitted in PDF, formatted using ACM sigconf style through https://cmt3.re-search.microsoft.com/AIMLSystems2021

Papers can be submitted under any of the three main topics listed above. 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 2021, 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.

Dual Submission Policy

A paper submitted to AIMLSystems can not be under review at any other conference or journal during the entire time it is considered for review at AIMLSystems, and it must be substantially different from any previously published work or any work under review. After submission and during the review period, submissions to AIMLSystems must not be submitted to other conferences / journals for consideration. However, authors may publish at non-archival venues, such as workshops without proceedings, or as technical reports (including arXiv).

Ethics

* Plagiarism Policy: Submission of papers to AIMLSystems 2021 carries with it the implied agreement that the paper represents original work. We will follow the ACM Policy on Plagiarism, Misrepresentation, and Falsification -- see https://www.acm.org/publications/policies/plagiarism-overview.

All submitted papers will be subjected to a "similarity test". Papers achieving a high similarity score will be examined and those that are deemed unacceptable will be rejected without a formal review. Conference organizers also reserve the right to report such unacceptable submissions to the superiors of each of the authors.

* Author Participation: Submission of papers to AIMLSystems 2021 also carries with it the implied agreement that one or more of the listed authors will register for and attend the conference and present the paper. Papers not presented at the conference will not be included in the final program or in the digital proceedings. Therefore, authors are strongly encouraged to plan accordingly before deciding to submit a paper.

Style and Author Instructions

Research papers must not exceed 6 pages, including any appendix, with unlimited number of pages containing only bibliography. Only electronic submissions in PDF format 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.

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Submission Link

https://cmt3.research.microsoft.com/AIMLSystems2021

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AIMLSystems'21

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21-23 October, 2021
Bangalore, India

KEY DATES

Papers are invited under different tracks, with deadlines starting from mid-June, 2021. Authors are requested to visit the website for individual track deadlines.

KEYNOTE SPEAKERS

- **Sang Cha,** SNU, Korea
- **Juliana Freire**, NYU Tandon School of Engineering, USA
- **Johannes Gehrke,** Microsoft Research, USA
- **Sergei Kuznetsov,** HSE University, Moscow, Russia
- **Geoff Webb**, Monash University, Australia
- **Gerhard Weikum**, Max-Planck-Institut für Informatik, Germany
- **Anand Deshpande**, Persistent Systems, India
- **Daniel Keller**, Visable Labs GmbH, Germany
- **Ananth Krishnan**, TCS, India
- **Rajeev Rastogi**, Amazon, India

CONTACT DETAILS

For information about individual tracks, please contact the respective Track chairs (information on the website)

For general inquiries
aimlsys.conference@gmail.com