

2022 Conference on Recent Trends in Embedded Artificial Intelligence (CREAI'22)

June 9-10, 2022

Organizer

This conference is jointly organized by **ASDF- USA** (<https://asdf.international/>), Real Time Embedded DSP Systems Lab, Department of Electrical & Computer Engineering, Oakland University and IEEE Southeastern Michigan Computer Society Technical Chapter.

Conference Website:

<https://mnaapub.com/CREAI/index>

<https://asdf.international/creai2022>

Conference Chair

- Dr. Subramaniam Ganesan, Director Real Time Embedded DSP Systems Lab, Department of Electrical & Computer Engineering, Oakland University, Rochester, MI 48309, USA. Contact: ganesan@oakland.edu

CREAI'22

There has been an explosion of research activities in Computer Science, Computer Engineering and Information Technology with applications in recent years. Such activities require interdisciplinary collaborations and contributions from scientists, engineers, researchers, academicians and entrepreneurs. The 2022 Conference on Recent Trends in Embedded Artificial Intelligence (CREAI'22) is the premier forum for exchanging ideas and interacting with experts from diverse fields such as Artificial Intelligence, Embedded System, Computer Network, Electronics Devices, Internet of Things (IoT), etc., and their applications.

Artificial Intelligence (AI) has driven a revolution, not only in the domain of computer science, communications, and information technology but also in diverse engineering areas. With the growing power of AI, new computing platforms based on Embedded Systems are necessary to support the emerging algorithms and applications from a system level to the circuit level. The CREAI'22 promotes the transfer of recent AI research into practical applications and implementations, i.e. developing intelligent systems and pursuing artificial intelligence usage for content, platforms, networks and devices. CREAI'22 will provide an excellent international forum for sharing knowledge and results in theory, methodology and applications of Embedded Systems and Artificial intelligence in diverse interdisciplinary domains as well.

Scope of CREAI'22

The scope of the conference includes the topics specified below, but not limited to these topics.

- Intelligent Sensors & Sensor Networks
- Distributed Embedded Computing
- Architecture for AI Computing Systems
- Autonomous Vehicles & Aeronautics
- Intelligent Edge

- Quantum Computing and Algorithms
- Real-Time Systems
- Robotic Devices & Systems
- Signal and Systems: Modeling & Automation
- Stand-alone Embedded Systems
- Circuits and Systems for AI
- Image, Video and Speech Processing
- Bayesian Learning and Signal Processing
- Agents and Multi-Agent Systems
- Fuzzy and Expert systems
- Neural Networks and Computational Neuroscience
- Supervised, Unsupervised, and Reinforcement learning
- Bioinformatics, Brain imaging and neural information processing
- Machine and Deep learning
- Evolutionary Computing algorithms
- Smart Wireless Sensors and Systems
- Smart Grids, Cryptography, Security and Wireless Network Technologies
- Mobile, Cloud Computing and Virtualization
- Tools and Platforms for AI
- Signal and Systems: Modeling & Automation
- Embedded based RF Circuits
- 5G-6G/IoT based Designs
- Embedded Systems for COVID-19
- Artificial Intelligence based Solutions for COVID-19
- Modeling, Control and Simulation of COVID-19
- Edge and Cloud based AI Computing Platforms
- Embedded based RF Circuits, Smart Cards, Missiles & Satellites
- Mechatronics and Telecommunications
- Reconfigurable Systems Medical Electronics & Circuits
- Mobile, Network & System Security

ALL THE PAPERS SUBMITTED ARE DOUBLE PEER REVIEWED

Proceedings Publications

All the registered papers of CREAMI'22 will be compiled in the form of proceedings with a unique ISBN.

Journals Publications

Selected papers of the Conference publication may be recommended for publication in Reputed Journals (Print Edition) after acquiring the written consent from the authors of the paper(s) subject to any other fees related to the publication. Publication into the Journals is at the discretion of the Publisher(s) and not into the hands of ASDF or the Host Institute. Further, the waiting period of the Journal Publication will be mentioned in the Acceptance Letter and shall not be forced to modify at any sequence.

Paper Submission

Authors should submit a paper in English, carefully checked for correct grammar and spelling, addressing one or several of the conference areas or topics. Each paper should clearly indicate the nature of its technical/scientific contribution, and the problems, domains or environments to which it is applicable. Only original papers should be submitted. Authors are advised to follow ethical norms regarding plagiarism and self-plagiarism thoroughly before submitting and must make sure that their submissions do not substantially overlap work which has been published elsewhere or simultaneously submitted to a journal or another conference with proceedings. Papers that contain any form of plagiarism will be rejected without reviews.

Authors can submit their work in the form of a Regular Paper, representing completed and validated research, or as a Position Paper, portraying a short report of work in progress or an arguable opinion about an issue discussing ideas, facts, situations, methods, procedures or results of scientific research focused on one of the conference topic areas. All papers must be submitted through the online submission platform. After the paper submission has been successfully completed, authors will receive an automatic confirmation e-mail.

All the papers should be less than 6 pages of length.

Registration fee: \$50. No walk-in registration

Venue: Oakland University, Rochester, MI 48309, USA.

Keynote Speeches (Tentative):

1. FreeRTOS in Embedded Systems
2. Open-Source Hardware and Software in Embedded Systems
3. AI in Medical applications
4. Hardware based Security and Infineon Tricore processors
5. Contributions of Blockchain in IoT Technology-
6. Panel discussion on Education of Embedded AI using MATLAB tools
7. Validation and Verification of Embedded Systems Design and Development
8. Blockchain and Bitcoin and Applications in the IOT

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