

# MCSOC 17<sup>th</sup> IEEE

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## Important Dates

- Paper submission: **April 30, 2024**
- Acceptance notification: July 20, 2024
- Camera-ready paper: July 31, 2024
- Conference date: December 16-19, 2024

Submission System: <https://edas.info/N32038>

<https://mcsoc-forum.org>

# 2024

Kuala Lumpur, Malaysia, Dec 16-19, 2024



The 17<sup>th</sup> IEEE International Symposium on Embedded Multicore/Many-core Systems-on-Chip (MCSOC-2024) aims to provide the world's premier forum of leading researchers in the Embedded Multicore/Many-core SoCs software, tools, and applications design areas for academia and industries. From the 2018 edition, the MCSOC symposium targets new emerging topics related to multicore neuro-inspired computing architectures and systems. Prospective authors are invited to submit their contributions. Submission of a contribution implies that at least one of the authors will have full registration to the symposium upon acceptance of their contribution. Submission can include technical, experimental, theoretical, conceptual, or a survey. **\*\*The conference is a hybrid event\*\***

## Technical Tracks

- Embedded Multicore/Manycore SoC Programming  
*Chair: Trong-Thuc Hoang (UEC, Japan)*
- Embedded Multicore/Manycore SoC Architectures  
*Chair: Yeong-Kang Lai (National Chung Hsing University, Taiwan)*
- Embedded Multicore/Manycore SoC Design  
*Chair: Cristinel Ababei (Marquette Univ, U.S.A)*
- Embedded Multicore/Manycore SoC Interconnection Networks  
*Chair: José L. Abellán (University of Murcia, Spain)*
- Embedded Multicore/Manycore SoC Systems Testing, Security and Trust  
*Chair: Tanja Harbaum (Karlsruhe Inst. of Technology, Germany)*
- Embedded Multicore/Manycore SoC Design Automation and Low-power Design  
*Chair: Stefan Holst (Kyushu Institute of Technology, Japan)*
- Embedded Multicore/Manycore SoC Real-Time Systems  
*Chair: Yi-Chung Chen (Mediatek, U.S.A)*
- Operating Systems Platforms for Real-Time Embedded Applications  
*Chair: Lei Yang (George Mason University, U.S.A)*
- Embedded Multicore/Manycore SoC Applications  
*Chair: Farshad Firouzi (DU, USA), Bahar Farahani (SBU, Iran)*
- Embedded Hardware Acceleration of AI on the Edge  
*Chair: Shaswat Shresthamali (Keio Univ, Japan), Po-Tsang Huang (NCTU, Taiwan)*
- Machine Learning for Energy-efficient, High-Performance, and Reliable Manycore Systems and Interconnects  
*Chair: Md. Farhadur Reza (Eastern Illinois University, U.S.A)*
- Chiplet-based Multicore Architecture and Design  
*Chair: Jason Eshraghian (UCSC, U.S.A), Darshika G. Perera (UCCS, U.S.A)*

## Special Sessions and Tracks

- Performance Optimization & Auto-Tuning of Software on Multicore/Manycore Systems  
*Chair: Norihisa Fujita (Tsukuba University, Japan)*
- Emerging Machine Learning and Deep Learning Models: Theory & Applications  
*Chair: Jungpil SHIN (University of Aizu, Japan)*
- Ubiquitous Networking and Immerging Applications  
*Chair: Yujie Li (Guilin University of Electronic Technology, China)*
- Embedded Neuromorphic Computing Systems  
*Chair: Khanh Dang (The University of Aizu, Japan)*
- Embedded, Applications and Ubiquitous Computing  
*Chair: Rize Jin (Tiangong University, China)*
- Embedded Machine Learning and Data Analytics  
*Chairs: Kasem Khalil (University of Mississippi, USA), Qinglin Yang (SYSU, China)*
- Embedded, Cyber-Physical, and IoT Systems  
*Chair: Liang Zhao (Shenyang Aerospace University, China)*
- Embedded Biomedical Engineering  
*Chair: Xin Zhu (The University of Aizu, Japan)*
- Machine Learning and Neuromorphic Computing for Edge and IoT  
*Chair: Anh Vu Doan (Infineon, Germany)*
- Parallel/Distributed, Grid, and Cloud Computing  
*Chair: Zhishang Wang (The University of Aizu, Japan)*
- Intelligent Mechatronics & Neuroprosthesis Technologies  
*Chair: Chun-Ming Huang (Taiwan Semiconductor Research Institute, Taiwan)*
- Distributed Computing & Comm. Techniques for Emerging AI Applications  
*Chair: Haoli Zhao (Hebei University of Technology, China)*
- Real-Time Natural Language Processing  
*Chairs: Mudar Sarem (Manara University, Syria), Li Ruixuan (Huazhong University of Science and Technology, China)*
- Optical Communications, Devices and Networking  
*Chair: Guo-Wei Lu (Kyushu University, Japan)*
- Special Session on Quantum Technology and Machine Learning  
*Chair: Deepika Saxena, The University of Aizu, Japan*

## Proceedings Publication and Indexing

The conference proceedings, including all technical tracks, special tracks, and special sessions and workshop papers, will be published by IEEE Conference Proceedings, which will be included in the Computer Society Digital Library CSDL and IEEE Xplore. All CPS conference publications are also submitted for indexing to EI's Engineering Information Index, Compendex, ISI Thomson's Scientific and Tech. Pro. Scopus, ISTP/ISI Proceedings.

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