

28th International Conference on Engineering of Complex Computer Systems (ICECCS 2024)

<https://cyprusconferences.org/iceccs2024>

Conference Focus

Recent years have witnessed a rapidly rising emphasis on the design, implementation and management of complex computer systems which are present in every aspect of human activities, such as manufacturing, communications, defence, transportation, aerospace, hazardous environments, energy, and healthcare. These complex systems are frequently distributed over heterogeneous networks and process a large amount of data, leveraging emerging artificial intelligence (AI), large language models, and machine learning techniques. Complexity arises from many factors, including the dynamic environment and the scenarios these systems operate in, demanding and sometimes conflicting requirements in functionality, efficiency, scalability, security, dependability and adaptability, data heterogeneity, as well as the wide range of development methodologies, programming languages and implementation details. Performance, real-time behaviour, fault tolerance, robustness, security, adaptability, development time and cost, and long life concerns are some of the key issues arising in the development of such systems.

List of Topics

Authors are invited to submit papers describing original, unpublished research results, case studies and tools. Papers are solicited in all areas related to complex computer-based systems, including the causes of complexity and means of avoiding, controlling, or coping with complexity. Topic areas include, but are not limited to:

Requirements, modeling and formal methods

- Requirements analysis and specification
- Model-driven development
- Model checking
- SAT/SMT solvers for software analysis and testing

AI, Complex intelligent models and complex systems

- Big data management
- Data-drive and AI-backed systems
- Machine learning for Software Engineering
- AI4SE and SE4AI
- Adaptive, self-managing and multi-agent systems

Security, reliability and dependability

- Safety-critical and fault-tolerant architectures
- Formal methods
- Security and privacy of complex systems
- Privacy-preserving AI
- Fairness

Software engineering

- Verification and validation
- Reverse engineering and refactoring
- Software architecture
- Human Machine Interaction
- Agile methods

Realistic complex systems

- Ubiquitous computing, context awareness, sensor networks
- Cyber-physical systems and Internet of Things (IoT)
- Autonomous systems and self-healing systems
- Industrial case studies

Important Dates

Abstract Submissions Due: **08 December, 2023 AoE**

Full Paper Submissions Due: **15 December, 2023 AoE**

Acceptance/Rejection Notification: **15 March, 2024 AoE**

Camera-ready Due: **15 April, 2024 AoE**

Conference Dates: **19-21 June, 2024 AoE**

Call for papers

Detailed call for papers including submission guidelines is available <https://cyprusconferences.org/iceccs2024/call-for-papers/>

Submission Guidelines

We invite all prospective authors to submit their manuscripts via the ICECCS 2024 portal, hosted by the EasyChair conference management system.

<https://cyprusconferences.org/iceccs2024/submission/>
An account has to be created for submission.

Organiser



University
of Cyprus



Coordinator: