

# 48<sup>th</sup> ICT and Electronics Convention MIPRO

Grand Hotel Adriatic Congress Centre & Hotel Admiral, Opatija, Croatia

Driving the Future with Smart and Intelligent ICT



June 2 - 6, 2025

#### **CHAIRS**

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#### **IMPORTANT DATES**

Abstract submission December 16, 2024

Full-paper submission Febuary 3, 2025

Acceptance notification March 21, 2025

Camera ready submission April 7, 2025

Instructions for paper preparation can be found on www.mipro.hr

Accepted papers in English presented at the conference will be submitted for inclusion in the IEEE Xplore Digital Library.









## **CALL FOR PAPERS**

# **CONFERENCE ON**



# SOFTWARE AND SYSTEMS ENGINEERING (SSE)

#### **SCOPE**

Rapid technology development has radically changed the way how we engineer complex software systems. Here we have to reconsider two important aspects:

- Complex systems are integrating modern technologies to interconnect humans and machines across various application domains thus changing societies as a whole and the role of the engineering profession has changed from purely functional endover to a society-responsible endeavor. Engineering future software systems would require understanding the constraints of multiple dimensions from Technical, Economic, Business, Political, Social, and Ethical issues.
- On the other hand, various modern technologies have changed the way how
  we engineer these systems. Modern technologies may replace many
  engineering tasks but we need a deep understanding of the consequences of
  using modern technologies in engineering these systems. For example, how
  tools based on Large Language Models (LLM) can be used in engineering
  complexity, and what are the challenges of its use in SSE?

In that respect, we need to reconsider the engineering profession and understand how to engineer future systems. More precisely the scope of our conference is focused on

#### HOW TO ENGINEER COMPLEX SOFTWARE AND SYSTEMS in terms of:

- · Technical aspects of these systems like
  - solutions in engineering complex systems that are based on modern technologies (e.g. use of LLMs)
  - solutions for automatized operation and management, coping with a variety of software systems across various application domains, their integration, interconnection, and complexity,
  - and how to provide high-capacity, faster, more reliable, available, and more secure technologies.
- Sustainable operation across their lifecycle and thus align with global goals of production of greener technologies.
- Responsible, trustworthy, and safe systems engineering methods and practices needed for the networked society of human beings and machines in everyday life.

Please forward to your colleagues





Submit your paper for the conference SSE which will be held at the 48<sup>th</sup> ICT and Electronics Convention **MIPRO 2025.** 

#### **REGISTRATION / FEES**

EARLY BIRD up to May 19, 2025

RFGUI AR from May 20, 2025

#### Members of MIPRO and IEEE

270 EUR

297 EUR

**Students** 

(undergraduate and graduate) 165 EUR

**Others** 

**300 EUR** 

150 EUR

330 EUR

#### **MORE INFO**

For all future information please visit www.mipro.hr or contact directly SSE Chairman:

#### **Tihana Galinac Grbac**

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> Official languages are English and Croatian.

### Topics of interest include, but are not limited to:

- Modern technology used in Software and Systems engineering, LLMs and Al for SSE
- Explainable Artificial Intelligence solutions for engineering complex systems
- Responsible Computing and Engineering Responsive Software Systems
- Sustainable Software and System Engineering
- Engineering of Autonomous and Software Defined Systems
- Engineering Concepts, Design Principles, Architecture, and Smart Software and System Composition
- Operation and Management of Complex Software and Systems, Software and Systems in Evolution
- · Engineering software system requirements
- Software Engineering Tools, Programming Concepts, Languages, and Frameworks
- · Design Concepts for Software System Evolution, Adaptability, Maintainability, Reuse
- Solutions for Continuous Integration, Run Time Verification and Certification and System Safety
- Technology development strategies and Innovation processes for complex systems
- Human and Machine Interaction with Complex Systems and Software **Functions and Compatibility**
- Challenges of Engineering Systems and Software in Various Application Domains (Manufacturing, Government, Health, Transport)
- Metrics for Evaluating Complex Systems and Software

Researchers are encouraged to submit either work in progress papers (of around 2,000 words), or full papers (of around 5,000 words) on completed research. The conference offers an opportunity for all those interested in researching Software and Systems Engineering domain to meet in a specialised venue to discuss research activities, findings and experiences. Attendees at the conference are encouraged to participate in discussion of all papers presented.

#### **ABOUT LOCATION**

Opatija is the leading seaside resort of the Eastern Adriatic and one of the most famous tourist destinations on the Mediterranean. With its aristocratic architecture and style, Opatija has been attracting artists, kings, politicians, scientists, sportsmen, as well as business people, bankers and managers for more than 180 years.

The tourist offer in Opatija includes a vast number of hotels, excellent restaurants, entertainment venues, art festivals, superb modern and classical music concerts, beaches and swimming pools – this city satisfies all wishes and demands.

Opatija, the Queen of the Adriatic, is also one of the most prominent congress cities in the Mediterranean, particularly important for its ICT conventions, one of which is MIPRO, which has been held in Opatija since 1979, and has attracted more than a thousand participants from over forty countries. These conventions promote Opatija as one of the most desirable technological, business, educational and scientific centers in South-eastern Europe and the European Union in general.

For more details, please visit www.opatija.hr and visitopatija.com.