26TH INTERNATIONAL CONFERENCE ON EMERGING TECHNOLOGIES AND FACTORY AUTOMATION
ETFA 2021 VÄSTERÅS, SWEDEN SEPTEMBER 7TH-10TH 2021

Call for Papers
SS05 - Fog computing and IoT

Organized and Co-Chaired by (sorted by last name)

Silviu S. Craciunas [1], Xenofon Fafoutis [2], Alessandro V. Papadopoulos [3]

[1] TTTech Computertechnik AG, Austria
[2] Technical University of Denmark, Denmark
[3] Mälardalen University, Sweden

- **FOCUS**. When Cyber-Physical Systems (CPS) become interconnected with each other and with the internet, they compose the Internet of Things (IoT), forming "the infrastructure of the information society." Fog Computing is a "system-level architecture that distributes resources and services of computing, storage, control and networking anywhere along the continuum from Cloud to Things" and is about to impact the IoT tremendously. The objective of this special session is to be a forum for presenting and discussing recent developments and trends in Fog/Edge Computing that represent challenges and opportunities for CPS and IoT researchers and practitioners.

- **TOPICS**
  - Fog Computing Architectures and Frameworks
  - Virtualization and Hypervisors for Fog Computing
  - Middleware for Fog Computing
  - Real-Time and Schedulability Aspects of Fog Computing
  - Formal Methods for Fog Computing Systems
  - Multi-tiered, Novel Resource Management Solutions Involving the Edge/Fog/Cloud
  - Data Centers and Infrastructures for Fog Computing
  - Programming Models and Runtime Systems for Fog Computing
  - Control-as-a-service and Virtualization of Control, Guaranteeing Quality-of-Control
  - Fog Computing Modeling, Analysis, and Performance Evaluation
  - Data Analytics and AI/ML at the Edge
  - Resource-Efficient On-Device Machine Learning
  - Use Cases for / and Applications of Fog Computing
  - Emerging Fog Communication Technologies and Protocols (IEEE Time-Sensitive Networking, 5G)
  - Industrial Wireless Communication Technologies (IEEE 802.15.4 TSCH, 6TiSCH)
  - Fog Computing Security, Data Privacy and Trust
  - Fog Computing Dependability and Safety

- **AIM.** The aim of this SS is to present recent developments and trends that represent challenges and opportunities for design-automation researchers and practitioners. In particular, we seek papers that identify, describe, and discuss advances in Fog computing and IoT technologies.

- **CONFERENCE FORMAT**. The conference will comprise multi-track sessions for regular papers, to present significant and novel research results with a prospect for a tangible impact on the research area and potential implementations, as well as work-in-progress (WiP) and industry practice sessions.

- **AUTHOR'S SCHEDULE (2021)**

  ❖Regular and special sessions papers
  - Submission deadline ..... May 7
  - Acceptance notification ..... June 4
  - Deadline for final manuscripts ..... July 14

  ❖Work-in-progress/Industry practice papers
  - Submission deadline ..... June 11
  - Acceptance notification ..... July 7
  - Deadline for final manuscripts ..... July 14