



Call for Papers

SS11 – Automated Testing and Simulation of Converged Automation Networks

Organized and Chaired by

Dirk Schulz¹, Amin Shahraki²

¹ABB AG Corporate Research Center, Germany, Dirk.Schulz@de.abb.com

²ABB AG Corporate Research Center, Germany, Amin.Shahraki@de.abb.com

FOCUS

Distributed control systems (DCS) are responsible for the safe and uninterrupted automation of large-scale industrial production systems, and automation functions undergo rigorous testing before process start-up. Automation networks are an integral part of the mission-critical infrastructure of such DCSes. With network convergence of IT, automation, and telecom applications, the complexity of providing QoS and cyber security for these applications is increasing, and similarly thorough testing as for automation is desirable. The area of automated and virtual/hybrid network testing in this context is a little worked field to which we would like to focus the attention of the scientific community.

TOPICS

- ❖ Automated generation of network test cases for automation systems
- ❖ Automated execution of network test cases, i.e. generation, injection, capture, and analysis of traffic corresponding to the test cases
- ❖ VNFs for usage in network emulation for testing purposes
- ❖ Automated setup of virtual or hybrid network emulation and/or simulation environments
- ❖ Achievable coverage and fidelity of such testing approaches

AIM

This Special Session aims at bringing together professionals from industry and academia to share cutting-edge concepts, recent developments, research results, and practical achievements in testing and simulating the Converged networks based on automated solutions.

SOLICITED PAPERS

- ◆ Original Research (Regular) ◆ Surveys ◆ Industry practice ◆ Work-in-progress

The working language of the conference is English, For submission rules, please refer to the Author's Instruction on the conference website.

PAPER ACCEPTANCE

Accepted, registered, and presented papers will be copyrighted by IEEE and published in the conference proceedings. The proceedings will be available in the IEEE Xplore® Digital Library. The final manuscript must be accompanied by a registration form and a registration fee payment proof and it is mandatory that at least one author attends and presents the paper at the conference. Failure to adhere to these guidelines may result in paper exclusion from post-conference distribution via IEEE Xplore by the ETFA 2024 Organizing Committee. All conference attendees must pay the conference registration fee and cover their own personal expenses for travel and accommodations.

AUTHOR'S SCHEDULE 2024

◆ Regular and special sessions papers

| | |
|--------------------------------------|------------------------------|
| Submission deadline | April 28th |
| Acceptance notification | May 31st |
| Deadline for final manuscripts | July 1st |

◆ Work-in-progress/ Industry practice papers

| | |
|--------------------------------------|-----------------------------|
| Submission deadline | May 26th |
| Acceptance notification | June 17th |
| Deadline for final manuscripts | July 1st |