Abstract

The server and software architectures in modern vehicles, health/medical systems, and supporting telecom infrastructures are changing to fulfil the growing demands for cybersecurity and safety. More than 90% of functions in cars and medical devices are controlled by software and cybersecurity attacks at safety functions can lead to disasters and up-to-date defensive software architectures need to deal with this. This requires the implementation of new design patterns in software and hardware design, as well as the development and training of new skills for the future design of complex systems.

Researchers are encouraged to submit original research contributions in all major areas, which include, but are not limited to:

Topics

- Functional safety related software and system design
- Cybersecurity related software and system design
- Integrating functional safety and cybersecurity
- Hazard and risk analysis
- Threat and risk analysis
- Defensive design
- Defensive programming strategies
- Secure development environments
- Cars/medical devices in the cloud
- Recent standards to be considered in software and system design for functional safety and cybersecurity
- Design patterns / state of the art design
- Known problems and risks with functional safety and cybersecurity
- New research and new emerging architectures in vehicles, medical devices, IT, …
Submission Deadlines

16.10.2020 Paper Submission
29.01.2021 Review of Papers and Distribution of Review Notes
30.04.2021 Refined Paper Submissions (in case of acceptance)
30.06.2021 Final Paper Acceptance Date

Special Issue publication date: J.UCS publication schedule

Submission and Evaluation Procedure

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