

VSC 2013: 1st Track on Validation of Safety critical Collaboration systems,
in 22nd IEEE WETICE International Conference - June 17-20, 2013 Hammamet - Tunisia
<http://www.cs.unict.it/~calvagna/VSC>

Call For Papers

This conference track brings the opportunity for researchers and developers from industry and the academic world to report the state of the art and exchange ideas about the support that should be provided in order to enforce confidentiality, security and reliability on the next generation of software technologies enabling collaborations among people. Such a support will enhance the level of quality and of user trust on services involving collaboration with unknown remote parties.

Nowadays widespread use of small, smart devices, such as smart cards, phones, and tablets, connected by the ubiquitous public Internet network, enable us to easily access a vast range of useful services. Such devices allow people to perform every day activities that either play a role in a collaborative task or are actually supported by some real-time or asynchronous collaboration technology.

Example services are the trading of goods, remote writing or signing of digital documents, joining social networks or work groups, remotely locating someone or something, and even services improving our ability to observe/control the environment around us.

In this context, applications that hold or exchange sensitive user data, like i.e. ATM cards storing security pin-codes, or healthcare applications using biometric data, need special protection against software failures or malicious behavior of downloaded code, that may expose the user to highly undesired consequences, such as threats to confidentiality and even financial or health danger.

This is even more true since the trend is indeed towards integration, that is, not to have many specialized access devices but a single, multi-purpose host handling many (or all) kinds of user services and its related data together, even though with limited computing resources, such as any small device hosting a Java or .Net run-time environment.

Moreover, inherent mobility and distribution of these small, open computing devices increases the complexity of the solutions to be adopted for handling secure and reliable execution of untrusted code, in order to ensure the data confidentiality strongly required by the applications. As a consequence, new and specially designed techniques can be devised and applied in order to reach the goal of increasing the trust on such a distributed computing environment to a level of strength matching with the high strength of the above safety critical requirements.

Submission is encouraged, but not limited, to the following topics:

- Validation testing of safety critical collaborative technologies
- Validation of concurrent technologies for collaboration
- Validation of large-scale distributed collaborative applications
- Software testing in multi-core collaborative environments
- Risk-based approaches to software validation
- Assessing security and robustness of collaborative applications
- Verification techniques tailored to embedded software
- Novel testing and validation algorithms for safety critical embedded software
- Validation metrics for safety critical collaborative technologies
- Dependability assessment techniques in collaborative environments
- Model-based validation and testing techniques for security
- Static and run-time techniques for byte-code level verification and validation
- Analysis of threats and countermeasures to the security of collaboration devices
- New software architectures for securing software on collaboration devices
- Performance analysis of security-related features
- Performance and QoS testing
- Testing and analysis tools

The conference proceedings will be published by the IEEE Computer Society Press. Special Issues of several international journals have been programmed with submission open by invitation only to authors of high quality papers.

Deadline for paper submission (extended):	Feb 11th, 2013
Decision to paper authors:	March 15, 2013
Camera Ready of accepted papers:	March 29, 2013
22th IEEE WETICE-2013 conference:	June 17-20, 2013



Submission instructions at <http://www.cs.unict.it/~calvagna/VSC>