

IEEE Systems Council

Technical Committee on Security and Privacy in Complex Information Systems

Online Meeting – 10/15/2015, from 1:30pm to 3:00pm US Eastern Time

Dr. Shiyun Hu organized the meeting.

Introductions were accomplished: Roger Oliva, Shiyun Hu, Radu Babiceanu, Kalum Udagepola

This TC aims at promoting interdisciplinary research and education in the field of security and privacy in complex information systems at various level covering infrastructure level, system level, software level, cyber level, hardware level and device level security. The TC will focus on addressing the security and privacy issues in critical applications such as intelligent transportation system (e.g., avionics and automotive) and smart energy system. We will also contribute to the educational development dedicated to integrity, safety, security programs for hardware and software.

Items discussed:

Members have demonstrated knowledge in systems, automation, product design; aerospace; standards development; aeronautics; intelligent transportation; smart home; IoT; smart energy; quality control

The TC has the plans on the following activities

- organize conference special sessions and obtain technical sponsorship for those events from SYSC
- start the process of proposing special issues for IEEE transactions and journals
- gradually develop a workshop dedicated to this TC

Roger commented that security has been a critical issue which although receives much attention in IEEE, real progress has been difficult to measure. This TC should make significant contribution towards establishing metrics that indicate what good looks like and pursue solutions to the most vexing problems.

A CPS security related INFOCOM workshop was recently approved and Shiyun is the co-chair for this event. He will discuss with the TC to see how to involve people from SYSC in this activity. More importantly, the TC should define what the expected outcome of participating in this workshop would be. For example, this could include the specific suggestions on hardware infrastructure modification for critical devices in order to make them more secure. Roger has shared his experience with IEEE SysCon 2015.

Radu organized IEEE High Assurance Systems Engineering Symposium 2016 and Shiyun organized IEEE International Symposium on Nanoelectronic and Information Systems in 2015. However, the reviewing deadlines for these two conferences have passed, but it would be still interesting to see how to create more activities related to this TC.

If we plan to propose some special issues for IEEE Transactions, we should start early. Shiyun has proposed 5 special issues with different IEEE Transactions, and he will look to see how to perform similar journal effort for this TC.

The TC members should actively identify a list of other experts who could contribute to this TC.

Kalum would like to establish a new conference in Nigeria and the TC supports his idea. He will provide more details in a month.

Items to be discussed in the next meeting:

- The TC will discuss what this TC can contribute to the SYSC newsletter
- Update from INFOCOM CPS Security workshop, on how to involve activities from this TC
- Update from Kalum
- Five-year vision for this TC
- Expected impact of this TC