

Workshop on Secure Trust Environment Model for Intelligent Vehicles (STEM-IV-2018)

Call for Papers

The workshop aims to foster discussion on automotive cybersecurity related problem and solutions, security standardization for intelligent vehicles and discuss security for Infrastructure of Intelligent transportation system. We need to know the security requirements needed during design and development of intelligent vehicles. Therefore it aims to investigate security, standardization, security method and process for vehicle communication.

This workshop invites contribution in automotive cybersecurity ranging from vehicle-communication for vehicle-to-vehicle (V2V) communication and Vehicle to Infrastructure (V2X) information, network theoretic analysis to security design and experimentation. To work with intelligent vehicles and intelligent transportation environment and concentrate on research work on Cryptography Embedded security, hardware security for intelligent vehicles. The scope of this workshop covers (but is not limited to) the following topics:

- Security threats for ITS and IV
- New approaches to ITS security, user privacy and trust
- Blockchain for ITS
- Security architecture, design, implementation and management of Intelligent vehicles
- Trust Environment Structure for Intelligent Vehicle Communication (V2V, V2I, V2C)
- Functional security, standards, and certification
- Security Techniques and protocols for cooperative vehicles
- Data communication security in networked embedded systems
- Security mechanism for automotive motion planning in dynamic environments
- Practical security experiences and testbeds related with intelligent vehicles

Organizing Committee

Madhusudan Singh, |Yonsei University, Korea| IEEE Standards Association| IEEE Blockchain Association| msingh@yonsei.ac.kr | Shiho Kim |Yonsei University, Korea| IEEE Intelligent Vehicle Society| IEEE Transportation Society | shiho@yonsei.ac.kr

Paper Submission Guidelines

All final submission should be written in English with a maximum paper length of six (6), printed pages. See conference webpage for instructions [here](http://wfiot2016.ieee-wfiot.org/authors/) <http://wfiot2016.ieee-wfiot.org/authors/>

Technical Program Committee

Madhusudan Singh, Yonsei University, Korea
Shiho Kim, Yonsei University, Korea
Pooja Khanna, Amity University, India
Atul Kumar, Oracle, India
Md. Iftexhar Salam, Queensland University of Technology, Australia
Dhananjay Singh, Hufs, Korea
More TPC members will be added later

Important Dates

Paper submission deadline: October 6, 2017
Acceptance Notification: November 15, 2017
Camera-Ready: December 10, 2017

IEEE International Workshop on Secure Trust Environment Model for Intelligent Vehicles (STEM-IV-2018)

conjunction with IEEE World Forum on Internet of Things, 05-08 February 2018 – SINGAPORE

Special Session Keynote



Prof. Dhananjay Singh
Senior Member of IEEE
Director, Sense Research lab
Head of Global IT Department,
Hankuk University of Foreign Studies, South Korea

Keynote: Connected Vehicles for Driver's safety and Security

Abstract:

An intelligent transportation management system is rapidly evolving. Nowadays, the convergence of ICT (Information communications technology) and cloud computing are widely adaptation among many services. The automobile industry has great expectations from these futuristic solutions so that they can improve safety of people, security of vehicles as well as reduce the cost of ownership of an automobile. In this talk, we presents connected vehicles architecture solutions for both safe and secure driving for personal/public vehicles. Moreover, our talk will show the performance of the secure cloud networks from that every driver (client) update real-time information for self-aware.

Biography:

Dhananjay Singh is the Chair of the Global Division of Information Technology and an Assistant Professor in the Department of Electronics Engineering at Hankuk (Korea) University of Foreign Studies (HUFS), Seoul, South Korea since 2012. Prior to joining HUFS, he was a Senior Member of Engineering Staff in the division of Future Internet Architecture at Electronics and Telecommunication Research Institute (ETRI) and Research Associate in the Division of Fusion and Convergence at National Institute of Mathematical Sciences (NIMS), Daejeon, South Korea from 2010 - 2012. He has completed his Doctoral (Ph.D.) degree in the Department of Ubiquitous IT from Dongseo University (DSU), Busan, South Korea in Feb. 2010 and Master (M.Tech.) degree in the Department of Wireless Communication and Computing from Indian Institute of Information Technology, Allahabad IIT-Allahabad, India in July 2006. Dr. Singh has awarded twice fellowship from Asia Pacific Advance Networks (APAN) to participate the meetings in 2006 at Singapore and again in 2007 at Manila, Philippines. He has co-supervised two Ph.D. candidates at Middlesex University, London in 2011 and 2012.

Dr. Singh is a Senior member of IEEE and ACM and serving as an Associate Editor for International Journal of Network Protocols and Algorithms (NPA) for Smart Grids Protocols and Algorithms, USA. He has delivered 50+ invited talks and served 100+ scientific conferences as a TPC member. He is an author of 100+ refereed scientific papers, which includes International journals, patents, book, book chapters, tech. draft, and conference/workshop proceedings. His research interests focus on the design, analysis, and implementation of algorithms and protocols for large-scale data set to solve real-world problems with Internet-oriented WSN applications, MANETs, 6lowpan, e-Healthcare system, wireless mesh network, scale-free networks, IoT, signal and system, machine-to-machine communication, future internet architecture & services etc.