

IEEE International Workshop on Trustworthy IoT (TloT 2021)

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Brief bio of Tapio Frantti

Tapio Frantti holds degrees of MSc, LicTech and Dr. Tech. from the Department of Automation and Information Technology, University of Oulu. He is also an Adjunct Professor in the University of Oulu. He has worked at the Outokumpu Polarit Oy, University of Oulu, Nokia Telecommunications, and Nokia Mobile Phones as a researcher, senior researcher, chief engineer, and research manager. He has also worked in Technical Research Centre of Finland as a chief research scientist and Research Professor and as Visiting Professor in Tokyo Denki University. Lately he has worked in Renesas Mobile Europe and Broadcom Communications Finland as a distinguished researcher and research leader, in IoLiving Ltd. as a CTO and as a Co-Director of Security and Software Engineering Research Center. Currently he works as a cybersecurity professor in the University of Jyväskylä. He also works in FRE company doing security, communication and control engineering consultation. He has been on the field about 30 years and he has published +100 scientific and technical papers in journals, magazines, books and international conferences. He has also authored several patents. Tapio Frantti also acts as a regular reviewer in international conferences and 12 scientific top rated journals and he is a member of Technical Program Committees in tens of international conferences. His research interest are in the adaptive and intelligent control theory, networking technologies and cyber security.

Brief bio of Timo Hämäläinen

Prof. Timo Hämäläinen has over 25 years' research and teaching experience of the computer networks. He has leaded tens of external funded network management related projects. He has launched and leads Master Programs in the University of Jyväskylä (currently SW&Comm. Eng,) and teaches network management related courses. He has more than 200 internationally peer reviewed publications and he has supervised 36 Ph.D theses. His current research interests include wireless/wired network resource management (IoT, SDN, NFV) and network security.

Brief bio of Pekka Abrahamsson

Pekka Abrahamsson received his PhD on Software Engineering in 2002 from University of Oulu. His research is in the area of emerging software technologies, empirical software engineering and the ethics of artificial intelligence. Prior to his current position he has served as a full professor in Italy and in Norway. He has also worked at VTT Technical Research Centre of Finland as a research professor. He has published broadly in his fields of expertise and received many awards and recognitions. He received the Nokia Foundation Award in 2007, Aminer.org selected him as Top-100 Most Influential Scholar in software engineering in 2016 and he co-authored the best paper of 2018 in Journal of Systems and Software. He is the co-founder of the Software Startup Research Network (SSRN) and a seasoned expert in leading international research projects.

Description

The dependence on the IoT systems for technical and economic success, has set the IoT actors vulnerable to hostile cyber actions and attacks, and other serious cyber threats. Under the serious threats, it cannot be confident that the IoT systems will work under attack from a sophisticated and well-resourced opponent. IoT systems are often part of the critical systems and their failure may directly impact human safety or lead to loss of valuable assets, making their security and safety a major concern for researchers, designers and users.

The TIoT workshop seeks to bring together researchers and practitioners working toward the improvement of security and trustworthy of IoT solutions in the various fields by discussing recent developments, current and forthcoming challenges, and exchanging their research findings and experiences. The workshop welcomes papers and presentations in the various fields of IoT, dealing with security, safety, and trustworthy.

Topics

The list of topics includes, but is not limited to:

- IoT vulnerability assessment, risk analysis, attack and threat models
- Architecture, design, and implementation of secure IoT devices and systems
- Design of secure IoT applications
- IoT operating system security and maintenance
- Resiliency and recovery of IoT systems
- Testing, verification, and validation of IoT devices and systems
- Antitampering solutions for IoT devices and systems
- Events monitoring

IoT standardization, certification, and interoperability
Practical experiences, empirical studies, and testbeds for IoT
Industrial experiences and best practices for IoT software development

Submission

Authors are invited to submit original unpublished research papers as well as industrial practice papers. Simultaneous submissions to other conferences are not permitted. Detailed instructions for electronic paper submission, panel proposals, and review process can be found at <https://qrs21.techconf.org/submission>.

The length of a camera ready paper will be limited to eight pages. Each paper should include a title, the name and affiliation of each author, a 150-word abstract, and up to 6 keywords. Shorter version papers (up to four pages) are also allowed.

All papers must conform to the [QRS Conference Proceedings Format](#) and Submission Guideline set in advance by QRS 2021. At least one of the authors of each accepted paper is required to pay full registration fee and present the paper at the workshop. Arrangements are being made to publish selected accepted papers in reputable journals. Submissions must be in PDF format and uploaded to the conference submission site.

Organizational Chairs

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Timo Hämäläinen, University of Jyväskylä
Pekka Abrahamsson, University of Jyväskylä

Program Committee Members

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