

Technical Program

of the GI/ACM Workshop

on 'Standardization of Industry 4.0 Automation and Control Systems' 24. September 2018,

at 'Smart Data Forum' @ FhG Heinrich-Hertz-Institute, Berlin

Workshop Objectives:

- I4.0 Cyber Defense Strategies
i.e. Industrial Consortia, Forum International de la Cyber Securite (FIC) & ANSSI & BSI, DKE etc.
- I4.0 Best Practices of Trustworthiness, Security, Privacy, Safety
i.e. Organizational Approaches on Operational Security Management (OSM), IoT, Smart City, Sensor Networks, Smart Metering, SIEM etc.
- I4.0 Standards & IT Laws & EU Regulations
i.e. IT Laws, Regulations, Standards of EU and its member states, i.e. TTIP, CETA, DIN/DKE, IEC 62443 IACS, VDE 0199 MMI, IEEE 1671 ATML, ITU-T F.748 IoT, ETSI ISG ISI etc.

Workshop Co-Chairs:

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Workshop Sponsors and Supporters:

Gesellschaft für Informatik GI,

German Chapter of the ACM,

Fraunhofer Institute for Open Communication Systems (FOKUS).

Workshop Technical Program:

includes but is not limited to the following issues:

- Formalized Test Purposes
- Application Interfaces in OPC-UA
- Security Gaps in I4.0
- Digitizing impact to the I4.0 World of Work
- Potential of Change of Blockchain Technology
- Hardware Virtualization Technology
- Secure Interoperability
- Challenges of the Triad 'Security, Safety and Availability' in the I4.0 World

The Workshop Speakers:

- *Axel Rennoch, Andre Wardaschka, Sascha Hackel:*
,Formalized Test Purposes for an Industrial Security Profile’;
- *Frank-Walter Jäckel, Tobias Wolff, Leonard Hackel:*
,Test Services for Interoperable and secure shop-floor IT Application Interfaces in OPC-UA;
- *Vanessa Watson, Jochen Sassmannshausen:*
,Time-sensitive Ethernet Technology for next Generation CPS/ I4.0’;
- *Jochen Link:*
,Zunehmende Vernetzung der Arbeitswelt erfordert Kenntnisse der vernetzten Bereiche, ergänzt mit fachlichen Grundlagen’;
- *Steffan Tönnissen, Frank Teuteberg:*
,Welches Veränderugspotenzial weist die Blockchain Technologie für die Branche Logistik auf?’;
- *Asmaa Tellabi, Ludger Peters, Christoph Ruland, Karl Waedt:*
, Security Aspects of Hardware Virtualization Technologies for Industrial Automation and Control Systems’;
- *Mithil Parekh, Yuan Gao, Asmaa Tellabi, Karl Waedt:*
,Secure Interoperability of Information and Control Systems and IT Systems’;
- *Michael Köpferl, Heiko Niedermayer, Gerog Carle:*
,Security, Safety and Availability Triad in a Real-world Industrial Environment and Resulting Challenges’;
- *Venesa Watson, Xinxin Lou, Yuon Goa, Karl Waedt:*
,Addressing Security Gaps in Industries seeking to adopt I4.0;
- *Mohammed Bawatna, Oliver Knodel, Rainer Spallek:*
,Data Acquisition and Analysis Sysstem for Measuring the Soil-Water Content using FPGA Technology on-board of an Autonomous Aerial Drone’;