Call for Participation to the 4th GI/ACM Standardization WS on I4.0 Automation and Control Systems, September 24, 2019 at ‚GI Jahrestagung', University of Kassel, Germany

Please register at: https://informatik2019.de/anmeldung/
Login for Registered Persons: https://www.conftool.org/informatik2019/index.php?page=login

This is the 4th GI/ACM Workshop (WS) in series joined with the yearly assembly of the German Association of Informatics (GI Jahrestagung) - this year 2019 hosted by Uni Kassel Germany. The former WS joined with ‚GI Jahrestagungen' happened in Berlin(3rd), Chemnitz (2nd) and Klagenfurt (1st).

In 2019 the 4th GI/ACM WS is aligned with workshops of the Sino-German Cooperation (SGC) on I4.0 that is commissioned by the German Federal Ministry of Economic Affairs and Energy. Whereas the 4th GI/ACM WS aims at Industrial System Aspects (24.9.), the SGC I4.0 WS address issues of IT Security (23.9.) and Functional Safety (25.9.).

This GI/ACM WS series addresses basically the industrial multipart standard IEC 62443. The work on I4.0 Standardization is internationally interconnected and requires communications with several standardization organizations including but not limited to: ETSI TC Cyber, IEC TC65 Smart Manufacturing, ISO/IEC JTC1 IT Security(SC27), AI (SC42), Industrial IoT (SC41).

Since 2013 the multipart standard IEC 62443 is continuously growing. Almost every 2 years a new part is published. The roadmap towards a complete view on I4.0 contains a system view of four groups of specifications, i.e. General Concepts (1), Policies and Procedures (2), System Aspects (3), Component Aspects (4). Recently in 2018 a 5th group of 'Industry Profiles' has been opened. Industry Profiles, e.g. Trustworthiness Profiles, are based on available parts of IEC 62443-2.4 for Solutions Suppliers and IEC 62443-4.1 for Product Developers.

A general issue that is addressed by the I4.0 workshop series is, which Profile of Trustworthiness is to be adopted by manufacturing suppliers. Trustworthiness is combined from lateral issues such as {Security Safety Reliability Resilience Privacy} and is formally represented as a <5-tuple>, called the Pentagon of Trust (PoT).

The Lecture Notes of Informatics (LNI) Proceedings of the Conference ‚GI Jahrestagung 2019' contain the papers presented at the 4th GI/ACM Workshop on Standardization of Industry 4.0 Automation and Control Systems (IEC 62443 IACS).

The Programme Committee (PC) and its Chairing Board (CB) of the GI/ACM WS acknowledge the manifold support from the associations of 'German Chapter ACM' and 'Gesellschaft für Informatik' (GI) of the D-A-CH (Germany - Austria - Switzerland) countries.

Furthermore the GI/ACM WS PC/CB appreciate the joining of the ‚Standardization Council I4.0' and the strategic 'Plattform I4.0' to the WS supporters. The latter two organizations comprise members of several national associations dealing with standardization gap analysis or working directly towards industrial standards in accordance with ISO/IEC JTC1, CEN/CLC, ETSI and others.

Additionally the European Cyber Security Organization (ECSO) joined to the list of IEC 62443 WS supporters. ECSO is organized by 6 working groups comprising Standardization of Supply Chain Management (1), International Collaborations (2), Sectorial Demanding I4.0 (3), Coordination with Regions (4) and Awareness of Cyber Ranges (5).

The GI/ACM WS PC/CB appreciate the continuous support in preparing the Workshop, printing posters, organizing decision-making meetings etc. received from FhG FOKUS Berlin!

Last not least the use of the EasyChair platform enabled us during preparation of the WS, to deal with all the diverging communications quite heterogeneously - including industrial, scientific, governmental start-up SMEs and many other participants being integrated to one virtual round table provided by the EasyChair tool.

July 10, 2019, Berlin

Jan-Bernhard de Meer (General Chair, GI/ACM WS on I4.0 Standardization: demeer@ACM.ORG)

Please Notice: *In addition to the GI/ACM I4.0 Standardization WS on IACSystems (24.9.) - Sino-German Cooperation (SGC) Workshops hosted by SCI4.0, PF I4.0 and GIZ CN are organized in parallel on related themes, i.e. on IT Security (23.9.) and on Functional Safety (25.9.). For further information please contact Mr. yves.leboucher@vde.com or, our Co-Chair Dr. karl.Waedt@framatome.com - Thank you!*

Agenda of the 4th I4.0 Standardization Workshop, September 24, 2019, University Kassel, WS Venue: Campus Center, Seminarraum 3

9h00 s.t. *Prof. Hannes Federrath, President of the German Association of Informatics (GI)*:
Welcome Address to the 4th I4.0 Standardization Workshop;

9h15s.t. *Jan de Meer, General Chair I4.0 WS, Member of the BoD German Chapter ACM*: IEC62443 WS Opening;
***Karl Waedt**, Framatome GmbH Erlangen, Sino-German Cooperation, Co-Chair I4.0:* WS Moderation;

9h20   ***Prof. Shi Xueling**, ITEI, Dr. Xiong Wenzi, Invited Speaker GIZ CN*: ‚Functional Safety for Smart Manufacturing in China 2025';

9h45   ***Ines Ben Zid** University of Bielefeld, Xinxin Lou*: ‚The application of Artificial Intelligence for Cyber Security in Industry 4.0';

10h00   ***Yuan Gao**, TÜV-Süd, Mithil Parekh*: ‚Operational Security Modelling and Analysis for IEC IACS';

10h15   ***Jochen Sassmannshausen** University of Siegen, Venesa Watson*: ‚Secure Granular Interoperability with OPC'

10h30   Coffee Break

*11h00s.t.**Axel Rennoch**, Invited Speaker Fraunhofer FOKUS*: ‚Improving IoT Quality using Standards and Open Source Tools.';

11h20   ***Prof. Christoph Ruland** University of Siegen, Asmaa Telabi, Abdelbast Sabri*: ‚Security Aspects of FPGA and Virtualization Case Studies';

11h40   ***Xinxin Lou,** University of Bielefeld, Karl Waedt*: ‚An Idea of Using Digital Twin to perform the functional Safety and Cyber Security Analysis';

12h00   ***Josef Schindler** Friedrich-Alexander University of Erlangen Nürnberg, DECENT Project, Erkin Kirdan*: ‚Interoperability of fast Charging Stations with Battery Booster';

12h15   ***Edita Bajramovic** Friedrich-Alexander University of Erlangen Nürnberg, Deeksha Gupta*: ‚Security Challenges and Best Practices for IIoT';

12h30c.t. *Jan de Meer smartspacelab GmbH % HTW Berlin*: ‚IEC62443 Workshop Wrap-up';