



48th ANNUAL CONFERENCE OF THE INDUSTRIAL
ELECTRONICS SOCIETY

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DIGITAL HEALTH INFORMATICS WORKSHOP

Oct 17, 2022

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IEEE Industrial Electronics Society
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Overview

The IEEE Industrial Electronics Society is sponsoring a workshop on building Requirements for Digital Health Data Informatics & Interoperability. Digital Health data is exceptionally valuable to Industry for keeping industry employees in good general health and pro-actively acting for potential exposures that can happen in an industry setting. Data for health analysis can come from multiple sources including medical devices, medical records, consumer health measurement devices, digital twins and even some industry control devices and sensors. This data provides multiple opportunities to assist the individual and business to pro-actively manage health situations. However, to reach these opportunities the data must be usefully organized, with security for all individuals, and accessibility to data with suitable authentication. This can be achieved with a suitable data organization with requirements and standards to address organization and accessibility. This opens major opportunities for efficient industry. The objective of this

workshop is to define an informatics framework model with which we can build the requirement, standards, and security structures for successful uses. This workshop technically partners with other IEEE societies.

This overall space of health management and its data represents an “elephant” of potential complexities. In the early days of the Internet the effort did not consider the future and its broad impacts as it progressed. There are many complex elements, players, regulations, and standards. The opportunities are great however, we need to take a long vision of where it can potentially evolve to ensure that we not just focused on one area of the “elephant” but assure we have the parts: solutions, standards, business, industry, and government work along a common theme to assure we cover the needs now and in the future.

Potential topics Include

- Consumer and IoT devices to provide health data
- Industry devices to provide health data
- Impact of emerging tech (blockchain, AI/ML, AR/VR, etc.)
- Potential Consumers of this health data
- Detecting health risk exposures in the factory
- Security Challenges and Strategies
- Establishing Domestic and International Regulations on health data
- Requirements and Standards to build successful health data informatics
 - What is going on
 - What we might be missing
 - How to provide end-to-end data portability
 - Existing programs

Who Should Attend/Stakeholders

The industrial community overseeing employee health, consumer community for healthcare and healthcare devices, medical systems wishing to utilize all health data for both patients and research, industry building devices and informatics systems in the space, regulators, governments, and standards organizations.

Benefits

The results of the workshop will help develop guideline, standard, and future research direction, which will help manufacturers, users, and their technology suppliers to design, assess, select, and deploy digital health systems and applications, data analytics, etc.

October 17, 2022 - Workshop Agenda (all times are in CET)

Overview: Examine the Problem space size, opportunities, and challenges	
8:25am	Michael Condry - The problem Space, opportunities, and challenges
8:55am	Dipak Kalra – The momentum in Europe: scaling up data driven health innovation
9:20am	Gora Datta – Digital Health Informatics Standards & Interoperability

9:45am – 10am Coffee Break

Standards Programs and Perspective	
10:00am	Maria Palombini - Putting Health Data to Work to Appreciate its Value as an Asset
10:30am	Sylvia Thun – Role of Standards in Health and Science – Translational Medicine
11:00am	Stefan Sauermann – Alignment of telemonitoring strategies in Austria with IEEE 11073 and other standards.
11:30am	Christoph Fischer – Standardization of Secure Plug & Play Interoperability for Multi-vendors Medical Systems

12noon – 1pm Lunch

Industry Perspective– consumer and industrial	
1:00pm	Timon Grob – Digital Health across the care continuum
1:30pm	Eisuke Hanada - Wireless communication in healthcare / hospitals in Japan
2:00pm	Martina Donahue – Wearable Technology, moving to Medical
2:30pm	Mark Wehde – Digital Health Informatics – Opportunities and Challenges

3:00pm-3:15pm Coffee Break

Regulation and Government Perspectives	
3:15pm	Catherine Chronaki – EU Regulations and its impact on Gravitare Health with G-lens
3:45pm	Robert Stegwee – Patients in charge of their health data in the EU

4:15pm-4:30pm

Short Break for Panel Organization

4:30pm – 5:15pm

Panel Discussion

- Making sure we have the “elephant” vision, not just local
- International vs. Domestic
- Measurement and Device Quality
- Trustful System

Fees

- Workshop-ONLY: €200. All registered for the workshop only will be provided with coffee breaks, lunch, and WiFi access. Special fee for early access.
- IECON attendees can attend the workshop with no additional fee but they must register so we can have a proper count of attendees.
- Registration will be announced in June of 2022 it will be on the IECON web site at <https://iecon2022.org/>

Organizers/Chairs

Michael Condry, condry@ieee.org
Gora Datta, goradatta@ieee.org






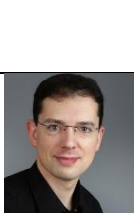


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The Speakers

	<p>Michael Condry, IEEE Life Fellow, IES Senior AdCom, member of Computer, TEMS, CTSoc and EMBS. Consultant, ClinicAI Board advisor, former CTO Intel Client Division, history including industry and academic positions. More BIO see www.condry.org</p>
	<p>Dipak Kalra, Professor Dipak Kalra is President of The European Institute for Innovation through Health Data (i~HD). Dipak is a former Professor of Health Informatics at University College London, a Visiting Professor at the University of Gent, a member of CEN and ISO standardization bodies and in the past a London GP.</p>
	<p>Gora Datta, Fellow HL7; Visiting Scholar at University of California Berkeley on Digital Health; founding co-Chair HL7 Mobile Health Workgroup, founding-Convenor ISO/TC215 Traditional Medicine, founding-Chair IEEE Blockchain Initiative Healthcare. https://www.linkedin.com/in/goradatta/</p>
	<p>Maria Palombini, Director, Healthcare & Life Sciences Global Practice Lead, IEEE Standards Association</p>
	<p>Stefan Sauermann, Vice Rector and Program Director Medical Engineering & eHealth at University of Applied Sciences Technikum Wien, Vienna, Austria. Chair of IEEE IC Digital Resilience. Founding member of IHE Austria. Member of HL7 Austria, CEN TC 251 and ISO TC 215 Health informatics See : www.technikum-wien.at/en/staff/stefan-sauermann/</p>
	<p>Christoph Fischer, Dr. rer. medic., Principal Systems Architect & Product Cybersecurity Specialist at Roche Diabetes Care. Active contributor of IEEE 11073 PHD WG, Bluetooth SIG MedWG, and PCHA. (ISC)² Certified Systems Security Architecture Professional (CISSP, CISSP-ISSAP), Certified Agile Regulatory Specialist™ (CARS), and Certified SAFe® Architect (ARCH, SA, SP). See https://www.linkedin.com/in/christoph-fischer-00206b54/</p>
	<p>Timon Grob, Timon Grob, Senior Scientist in the Digital Standardization Department of Philips Research</p>
	<p>Eisuke Hanada Dr. Eng., Professor in Faculty of Science and Engineering, Saga University, A board member of Healthcare Engineering Association of Japan. See https://www.ai.is.saga-u.ac.jp/~hanada/index-e.html</p>
	<p>Martina Donahue, Marketing Manager, Shimmer Research</p>

	<p>Mark Wehde, Chair Mayo Clinic Engineering, Assistant Professor of Biomedical Engineering Mayo Clinic College of Medicine and Science, Fellow Mayo Clinic Academy of Educational Excellence, Medical Device Innovation Fellow University of Minnesota Technology Leadership Institute</p>
	<p>Catherine Chronaki, a computer engineer by training, is the secretary general at the HL7 Europe Foundation and the EFMI Vice President (2022-2024). She has served as Associate Editor IEEE Transactions for IT in Biomedicine and also served on the HL7 International Board (as Affiliate Director 2008-2012). She is a member of the Board of HL7 Hellas and the eHealth Stakeholders group of the European Commission. Previously, she has served as secretary on the Nucleus of the eCardiology WG of the European Society of Cardiology.</p>
	<p>Robert Stegwee, PhD, Strategic Consultant for Health IT, focusing on meHealth for citizens and professionals in health and care, based in The Netherlands; Chair of CEN/TC 251 Health Informatics and member of the European eHealth Stakeholder Group; member of the Joint Initiative Council for Global Health Informatics Standardization</p>
	<p>Sylvia Thun, Director Core Facility Digital Medicine and Interoperability, Berlin Institute of Health</p>