Enabling CAS Technologies for Industrial IoT at the Core of Industry 4.0

13 – 14 December, 2018

Dipartimento Ingegneria della Informazione (DII), Aula Magna, University of Pisa, Via G. Caruso 16, 56122, Pisa, Italy

This seasonal school offers lessons in the field of circuit and systems (CAS) for the emerging topic of Industrial Internet of Things (I2oT), which is at the core of the industry 4.0 revolution. The uniqueness of this school vs. other schools on IoT will be that (1) the focus is on industrial applications (CAS solutions for logistics and digital supply-chain, product/process digitization, healthcare, automotive and intelligent transport systems) and (2) beside lectures from IEEE DLs and IEEE Fellows, the seasonal school includes industry speakers, operating in the CAS domain, from Intel, Keysight, Huawei, IngeniArs, Dyson, Quantavis, Free-space, IDS, Cubit, Sofidel, Calearo. Lessons will be offered in English.

School Agenda

Dec 13, 2018 (Thursday)		Dec 14, 2018 (Friday)	
10.00-10.20	Opening	09.30-13.00	Lectures
10.20-13.00	Lectures	13.00-14.00	Lunch
13.00-14.15	Lunch	14.00-16.30	Lectures
14.15-16.30	Lectures	16.30.-16.45	Closing

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++ Industrial IoT IEEE CAS Seasonal School ++

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Speakers from
IEEE DLs, Intel, University of Pisa, Huawei, Keysight, Calearo, Quantavis, Sofidel, University of Bologna, IngeniArs, Cubit, IDS, Dyson, Free-Space

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Lectures

- **M. Canale, Calearo Antenne, "**Automotive Connectivity Systems: Evolutions of Services, Technologies and Architectures for Connected Cars"
- **Y.-K. Chen, INTEL, IEEE Fellow & CAS DL, "**Challenges and Opportunities of CAS on IoT"
- **R. Cioni, IDS,** "Industrial IoT at IDS: Enabling Technologies and New Opportunities"
- **A. Congi, Sofidel,** "IoT CAS for Warehouse Management"
- **M. Cosci, Dyson,** "Innovation and Global Market Access"
- **D. Di Marzio, Keysight,** "IoT Test Solutions"
- **R. Flamini, Huawei Italy Research Center,** "Antenna, IC and System Solutions for 5G"
- **S. Giordano, Cubit founder,** "Networking Protocols and Architectures for IIoT and Cyber Physical Systems"
- **C. Giunti, Ingeniars,** "IoT Circuits and Systems for Health 4.0"
- **G. Iannaccone, IEEE Fellow, Quantavis founder,** "Devices and Circuits for Machine Learning in IoT Applications"
- **M. Macucci,** "Ultra-low-power Circuits and Systems, and Application of New Materials to Circuits Above 100 GHz"
- **G. Manara, IEEE Fellow, Cubit President,** "Near-field Focused Antennas for IIoT"
- **R. Mariani, INTEL, "**Functionally Safe SW-defined and Autonomous IoT**"**
- **A. Monorchio, IEEE Fellow, Free-space founder,** "Small Antennas Design for WSN and IIoT"
- **R. Rovatti, IEEE Fellow & CAS DL,** "Compressed Sensing for Parsimonious Compression and Security in IoT"
- **S. Saponara, IEEE IMS DL, Ingeniars founder,** "Measurement Performance of Sensor Systems towards Autonomous Vehicles"
- **C. Vallati, "**Edge & Fog Computing Technologies for Industrial IoT"
- **Welcome from IEEE Italy Section VP, B. Tellini** and **DII director G. Anastasi**
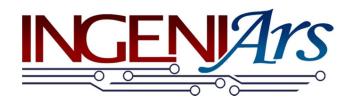
Regitration Fees

- *Free for IEEE CAS Student Members and University of Pisa Students*
- *Free for IEEE Student Members including CAS subscription when renewing*
- *IEEE-CAS Members 50 €, IEEE Members 75 €, Others 100 €*

Key Organizing Figures:

Sergio Saponara, University of Pisa; Yen-Kuang Chen, Intel

To register please contact:

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Detailed Agenda

December 13, 2018, Thursday

10.10 – 10.10 S. Saponara, G. Manara "Opening: Enabling CAS Technologies for Industry 4.0"

10.10 – 10.20 Institutional Welcome, IEEE Italy Section VP B. Tellini, DII Director G. Anastasi

10.20 – 10.45 G. Manara, IEEE Fellow, Cubit President, "Near-field Focused Antennas for IIoT"

10.45 – 11.30 D. Di Marzio, Keysight, **"**IoT Test Solutions**"**

11-30 – 12.15 M. Cosci, Dyson, "Innovation and Global Market Access"

12.15 – 13.00 A. Congi, Sofidel, "IoT CAS for Warehouse Management"

Lunch Break

14.15 – 15.00 R. Flamini, Huawei Italy Research Center, "Antenna, IC and System Solutions for 5G"

15.00 – 15.30 A. Monorchio, IEEE Fellow, Free-space founder, "Small Antennas Design for WSN and IIoT"

15.30 – 16.00 C. Vallati, "Edge & Fog Computing Technologies for Industrial IoT"

16.00 – 16.30 S. Saponara, IEEE IMS DL, IngeniArs founder, "Measurement Performance of Sensor Systems towards Autonomous Vehicles"

December 14, 2018, Friday

09.30 – 10.30 R. Mariani, INTEL, "Functionally Safe SW-defined and Autonomous IoT**"**

10.30 – 11.30 R. Rovatti, IEEE Fellow & CAS DL, "Compressed Sensing for Parsimonious Compression and Security in IoT"

11.30 – 12.00 M. Canale, Calearo Antenne, "IoT Wireless Circuits and Antennas for Automotive"

12.00 – 13.00 Y.K. Chen, INTEL, IEEE Fellow & CAS DL, "Challenges and Opportunities of CAS on IoT"

Lunch Break

14.00 – 14.30 R. Cioni, IDS, "Industrial IoT at IDS: Enabling Technologies and New Opportunities"

14.30 – 15.00 C. Giunti, IngeniArs, "IoT Circuits and Systems for Health 4.0"

15.00 – 15.30 G. Iannaccone, IEEE Fellow, Quantavis founder, "Devices and Circuits for Machine Learning in IoT Applications"

15.30 – 16.00 M. Macucci, "Ultra-low-power Circuits and Systems, and Application of New Materials to Antennas and Circuits Above 100 GHz"

16.00 – 16.30 S. Giordano, Cubit founder, "Networking Protocols and Architectures for IIoT and Cyber Physical Systems"

16.30 – 16.45 S. Saponara, Y.K. Chen, "Closing: Enabling CAS Technologies for Industry 4.0"

*Times Schedule may change according to speaker needs