

3rd IEEE Italy Section Summer School

Perugia, September 17-23 2017

Smarter Engineering towards Industry 4.0



The IEEE Italy Section and the Department of Engineering – University of Perugia, introduce:

3rd IEEE Italy Section Summer School: SMARTER ENGINEERING FOR INDUSTRY 4.0 (SmE4I4.0)

Aimed at engineers wishing to meet Industry 4.0 challenge

School of Engineering, via G. Duranti, Perugia, Italy, 17 - 23 September 2017

OPEN FOR APPLICATIONS

Industry 4.0 or the forth industrial revolution has been opened by the astonishing rise in computational power and connectivity. Paradigms of production change: new forms of human-machine interaction are required (touch interfaces, augmented-reality systems, etc.), and new technologies for transferring digital instructions to the physical world are needed (advanced robotic, 3-D printing, etc.). Students will be exposed to topics such as:

- Additive Manufacturing
- Digitalization, Modelling and Simulation
- Data Security
- Deep Learning
- The role of electrification and automation in the agriculture of the future
- Telemedicine
- Human-Machine Interfaces

General Chairmen

- Elisabetta M. Zanetti (University of Perugia)
- Antonio Faba (University of Perugia)

Technical Program Chairmen

- Elisabetta M. Zanetti (University of Perugia)
- Paolo Conti (University of Perugia)
- Giambattista Gruosso (Politecnico di Milano and IEEE Italy Section)
- Vitoantonio Bevilacqua (Politecnico di Bari)

Treasurer

- Sergio Rapuano (IEEE Italy Section)

Steering Committee

- Ermanno Cardelli (IEEE Italy Section),
- Tiziana Tambosso (IEEE Italy Section),
- Dario Petri (IEEE Italy Section)

Web and Publicity

- Francesca Tufi (University of Perugia)
- Michele Pompei (University of Perugia)

Conference fees

	Regular (one week)	One-day
IEEE Member	190 €	70 €
Non-IEEE Member	240 €	90 €



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A Qualifying IEEE Certificate of Attendance will be issued to attendees.

PRELIMINARY PROGRAM

Sunday, September 17-th

17,00 Welcome and reception

Monday, September 18-th

9,00-13,00 **M. Varetti**, AMICO (Additive Manufacturing Industrial Consultant), *Technologies for metal additive manufacturing*
14,30-18,30 **G. Rossi**, Univ. of Perugia, *Contactless stress and strain measuring techniques for the experimental optimization of additive manufacturing components*

Tuesday, September 19-th

9,00-10,50 **M. Varetti**, AMICO (Additive Manufacturing Industrial Consultant), *From structural optimization to executive drawings*
11,10-13,00 **G. Rossi**, Univ. of Perugia, *Additive manufacturing of plastic components*
14,30-18,30 **D. Raguseo**, IBM Security, *Security challenges in Industry 4.0*

Wednesday, September 20-th

9,00-13,00 **C. Bignardi, M. Terzini**, Politecnico di Torino, *Patient-specific planning of arthroplasty: from CT scans to structural models* (break **10,20-10,40**)
13,00-14,30 lunch
14,30-16,30 **E. Ricci**, Univ. of Perugia, *Deep Learning*
14,30-20,30 Guided Tour and Dinner

Thursday, September 21-st

9,00-10,50 **C. Bignardi, M. Terzini**, Politecnico di Torino, *Patient-specific planning of arthroplasty: from CT scans to structural models*
11,10-13,00 **G. Gruosso, L. Bascetta**, Politecnico di Milano, *Farm 4.0: the role of electrification and automation in the agriculture of the future*
13,00-14,30 lunch
14,30-18,30 **G. Gruosso, L. Bascetta**, Politecnico di Milano, *Farm 4.0: the role of electrification and automation in the agriculture of the future*

Friday, September 22-nd

9,00-10,50 **V. Bevilacqua** Politecnico di Bari, *New methodologies of Human Machine Interaction for Gait Analysis and neurological Movement Disorders*
11,10-13,00 **E. Pasero**, Politecnico di Torino, *Telemedicine today: Where the Hospital isn't a Hospital at all*
14,30-16,20 **M. Moschetta**, Univ. di Bari, *The tomosynthesis: a new radiologic diagnostic technique*
17,10-18,30 **C. Loconsole**, Politecnico di Bari, *Latest assistive technologies for the visually impaired*

Saturday, September 23-rd

9,00-11,00 Final evaluation test
11,00-12,00 Certificate presentation
12,00-13,30 Closing ceremony - Porchetta and Bierstube

