

2015 IEEE World Conference on Factory Communication Systems (WFCS 2015)

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2015 IEEE World Conference on Factory Communication Systems (WFCS)

COMMUNICATION in AUTOMATION

May 27-29, 2015, Palma de Mallorca, Spain

Program

Wednesday, May 27th, 2015

08:00 -
09:00

Registration

09:00 -
09:45

Opening Session

09:45 -
11:00

Session 1: Wireless Networks

Chair: Francisco Vasques

Using LTE as an Access Network for Internet-Based Cyber-Physical Systems

Mohammad Elattar and Jürgen Jasperneite 1

Extracting Markov Chain Models from Protocol Execution Traces for End to End Delay Evaluation in Wireless Sensor Networks

François Despaux, Ye-Qiong Song and Abdelkader Lahmadi 8

Multi-hop routing within TDMA slots for teams of cooperating robots

Luís Oliveira, Luis Almeida and Pedro Lima 16

11:00 -
11:30

Coffee break

11:30 -
12:30

Keynote 1: Industrial Communication and Networking in Automation Systems – today and tomorrow

Chair: Stefano Vitturi

Industrial Communication and Networking in Automation Systems – today and tomorrow

Linus Thrybom N/A

12:30 -
14:00

Lunch break

14:00 -
15:00

TII-SS-1: Reliability and Architectures

Chair: Martin Wollschlaeger

iPRP: Parallel Redundancy Protocol for IP Networks

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A RESTful Extension of OPC UA

Sten Grüner, Julius Pfrommer and Florian Palm 28

15:00 -

Coffee break

15:30

15:30 - **TII-SS-2: Scheduling and Performance Analysis**

17:00 Chair: Jürgen Jasperneite

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09:00 - **TII-SS-3: Industrial Wireless Communication Systems**

11:00 Chair: Lucia Lo Bello

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The IEEE 802.11n wireless LAN for real-time industrial communication
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A Simulation-based Comparison of IEEE 802.11's Timing Advertisement and SyncTSF for Clock Synchronization
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Scheduling Transmissions in Industrial Networks Using Source Relaying and Packet Aggregation
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11:00 - Coffee break
11:30

11:30 - **Keynote 2: Helping people(besides machines) understand each other in integrated manufacturing**

12:30 Chair: Paulo Pedreiras

Helping people (besides machines) understand each other in integrated manufacturing
Nicola Guarino N/A

12:30 - Lunch break
14:00

14:00 - **WiP-S1: Industrial Communication Networks: Design, Analysis and Performance**

15:00 Chair: Henning Trsek

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Derk Wesemann, Jens Dünnermann, Marian Schaller, Norman Banick and Stefan Witte 60

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17:30 Chair: Luis Lino Ferreira

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12:30 Chair: Paolo Ferrari

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Closing Session