

Information

The meeting is free of charge for ATA members and students.

In case you are not a member, you can find the ATA subscription form at the web site (www.ata.it) or at the meeting reception.

To PhD students, Juniores fee will be applied.

To join the workshop, please fill in the subscription form at the following web site: <http://www.sswc2008.netsons.org/>.

Due to organizational needs, the subscription deadline is fixed on February the 1st.



Contacts:

CRF, Trento Branch:
Giuliana ZENNARO
giuliana.zennaro@crf.it

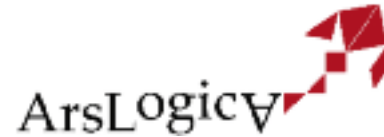
ATA - Associazione Tecnica Automobile
Trentino Alto Adige Branch:
Silvia DI ROSA
silvia.dirosa@crf.it

Venue:

Fondazione Cassa di Risparmio di Trento e Rovereto
Access from Via Garibaldi, 33
38100 Trento, ITALY



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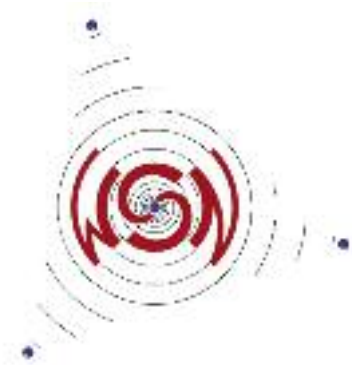
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Smart Sensors on Wireless Cars -- WSN approach --

February 5th 2009

Caritro Foundation Hall
Via Garibaldi 33
Trento, ITALY



Wireless Sensor Networks (WSN) consist in a distributed nets of nodes integrating the functionalities of communication, motion, measurement of specified parameters, data sharing, data processing and, in the end, equipped with actuating capabilities.

Since sensor nodes are spread autonomous devices, their energy and other resources are limited by size and cost constraints, therefore the design is influenced by several challenging factors, in terms of limiting constraints, among which energy supply, computing power, dimensions, and available bandwidth of the wireless links connecting sensor nodes. Moreover each node should be autonomous from the power supply point of view, thus issues as power storage (e.g. high capacity batteries) and energy scavenging (e.g. by solar cells) must be taken into account.

The organization of this event comes from the purpose to provide an exhausted view on topics inherent WSN research issues and on going applications and projects; two sessions are envisaged: the morning session dedicated to theoretical/technical aspects, the afternoon one dedicated to relevant exemplifying applications mainly in automotive field.

SCIENTIFIC COMMITTEE

Giuliana ZENNARO, CRF
 Marco DARIN, CRF
 Pietro PERLO, CRF
 Alessio CORONGIU, CRF

Program

February 5th

<p>Registration:</p> <p style="text-align: center;">Atrium</p> <p>Timing: 8:30 – 09:00</p>	<p>Lunch Break</p> <p style="text-align: center;">Atrium</p> <p>Timing: 12:30 – 14:00</p>
<p>Workshop official opening</p> <p style="text-align: center;">Caritro Foundation Hall</p> <p>Mario MARANGONI, <i>President of "Fondazione Caritro". Trento, ITALY</i></p> <p>Antonio FUGANTI, <i>President of ATA Trentino Alto Adige Branch and Director of CRF Trento Branch. Trento, ITALY</i></p>	<p>Afternoon session: Applications</p> <p style="text-align: center;">Caritro Foundation Hall</p> <p>Chairman: Claudio BOREAN</p> <p>14:00 Major Challenges in Monitoring and Control for the Automotive Industry Key Note Jorge PEREIRA, <i>European Commission. Brussels, BELGIUM</i></p> <p>14:30 Assessing Coexistence versus Convergence in Heterogeneous Wireless Sensor Networks: The CHOSEN Project Giuliana ZENNARO, <i>CRF Trento Branch. Trento, ITALY</i></p> <p>14:50 Wireless in Car Silvia ZANGHERATI, <i>CRF. Orbassano (TO), ITALY</i></p>
<p>Morning session: WSN specifications</p> <p style="text-align: center;">Fondazione Caritro Hall</p> <p>Chairman: Ovidiu VERMESAN</p> <p>09:30 Ubiquitous Wireless Sensor Networks and future "Internet of Things" Key Note. Ovidiu VERMESAN, <i>Senior Research Scientist in SINTEF ICT. Oslo, NORWAY</i></p> <p>10:00 Radio-Frequency Interfaces in WSNs: Requirements, State-of-the-art, and Future Trends Renzo AZARO, <i>Università di Trento. Trento, ITALY</i></p> <p>10:20 Scaling security concepts for WSNs Andreas SCHMIDT, <i>CREATE-NET. Trento, ITALY</i></p> <p>Coffee Break</p> <p>11:00 Programming WSNs with data sharing abstractions Amy Lynn MURPHY, <i>Fondazione Bruno Kessler. Trento, ITALY</i></p> <p>11:20 Mechanical Vibrations Energy Harvesting and Power Management Pierre Damien BERGER, <i>CEA LETI, Commissariat à l'Énergie Atomique. Grenoble, FRANCE</i></p> <p>11:40 Hardware platforms for WSN desing: RF components and microcontrollers Michele CORRÀ, <i>University of Trento. Trento, ITALY</i></p> <p>12:00 ZigBee Wireless Sensor Networks Claudio BOREAN, <i>ZIGBEE Alliance, Telecom Italia. Torino, ITALY</i></p>	<p>Coffee Break</p> <p>15:30 From Sand to Applications: the integrated WASP approach Michael HELLENSCHMIDT, <i>Fraunhofer IGD. Darmstadt. GERMANY</i></p> <p>15:50 Passive Localization and Tracking of Moving Targets in a WSN Infrastructured Environment Manuel BENEDETTI, <i>University of Trento. Trento, ITALY</i></p> <p>16:10 Trentino Research & Innovation for Tunnel Monitoring Gian Pietro PICCO, <i>University of Trento. Trento, ITALY</i></p> <p>Prototypes</p> <p style="text-align: right;">Timing: 16:30 – 18:00</p>