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Special Sessions on Food Safety, Visual Analytics, Resource Restricted Embedded and Sensor Networks, and 3D Imaging and Display

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Introduction

Resource Restricted Embedded and Sensor Networks

We would like to thank all attendees of SPIE's Defense + Security (DSS) 2008 conference who visited this new promotional session on Resource Restricted Embedded and Sensor Networks, which took place on Monday, 17 March 2008.

This year's promotional session addressed most hot research questions for resource restricted embedded and sensor networks. The session consisted of a number of lectures and tutorials, which gave an overview of state of the art and existing solutions in the field, the current vision of the applications and use scenarios, and the key open issues in the area.

The first tutorial in these proceedings provides an overview of state of the art and recent development of embedded network solutions research and was authored by Michel Gillet and Sergey Balandin. Michel and Sergey work at Nokia Research Center in Finland and are official Nokia representatives in MIPI alliance standardization which is targeted in development of new embedded networks based interconnect standard for mobile devices.

The second tutorial comes from St-Petersburg University of Airspace Instrumentation (SUAI), Russia. It was presented by Prof. Sheynin, who is the key contributor and member of Spacewire standardization board from Russian side. The tutorial discusses high-rate serial interconnections for embedded and distributed systems with power and resource constraints.

The third tutorial is "Applications of wireless sensor and control networks for industrial applications, work machines, and vehicles," given by Vesa Pentikäinen from VTT Elektroniikka Research Center in Finland.

The collected set of tutorials in these proceedings provides good overview of state of the art and current trends in research around resource restricted embedded and sensor networks.

Sergey I. Balandin