

## **CPSSC - 1st International Workshop on Cyber-Physical Systems in the Context of Smart Cities**

Constantin Scheuermann<sup>1</sup> and Andreas Seitz<sup>2</sup>

### **1 Motivation**

The interconnection and exchange of information is a basic requirement to enable Smart Cities. Such an interconnection must be realized within each domain (vertically) as well as among different domains (horizontally). Typical domains cover energy, automotive, health, intelligent buildings, transportation, manufacturing as well as the military domain. Therefore, horizontal and vertical information sharing within Smart Cities is essential and comes with challenges for software developers. Which models, architectures, patterns and data structures need to be developed to enable and further improve the interconnection and digitization of Smart Cities, are major questions that need to be addressed.

### **2 Description**

This workshop is a forum for authors to present their early research findings in the field of Cyber-Physical Systems in the context of Smart Cities. The workshop aims at overviews, theoretical approaches, tools and frameworks, applications, system infrastructures and test beds for Cyber-Physical Systems. The following list depicts the main fields of interest:

- Theoretical foundations of Cyber-Physical Systems
- Smart City Applications
- Smart Environments
- Novel Industrial Applications of Cyber-Physical (Human) Systems
- Detailed Case Studies
- Infrastructure Applications for Smart Cities
- Security/Privacy
- Architecture and Modeling of Cyber-Physical Systems

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### 3 Programm Committee and Organization

Programm Committee:

- Mathias Althoff, Technical University of Munich (TUM), Munich, Germany
- Bernd Bruegge, Technical University of Munich (TUM), Munich, Germany
- Michael Heiss, Siemens AG, Head of Research Group CPSs, Vienna, Austria
- Bruce Horn, Intel Cooperation, USA
- Hyun-Wook Jin, Konkuk University, Seoul, Korea
- Sung-Soo Lim, Kookmin University, Seoul, Korea
- Chi-Sheng Shih, National Taiwan University, Taipei, Taiwan
- Monika Sturm, Leibniz Universität Hannover, Siemens AG, CPS Principal, Vienna, Austria
- Birgit Vogel-Heuser, Technical University of Munich (TUM), Munich, Germany

Organization:

- Constantin Scheuermann, Technical University of Munich (TUM), Munich, Germany
- Andreas Seitz, Technical University of Munich (TUM), Munich, Germany

### 4 Program

<b>09:00–10:00</b>	Keynote - Volker Hartkopf
<b>10:00–10:30</b>	Coffee Break
<b>10:30–11:30</b>	Presentations
<b>11:30–12:30</b>	Panel Discussion: <i>The Future of Smart Cities</i>
<b>12:30–14:00</b>	Lunch Break

### 5 Discussion Panel: The Future of Smart Cities

As part of the CPSSC Workshop a Panel about *The Future of Smart Cities* with well known experts in the area of Smart Cities, Cyber-Physical Systems and Smart Office Environments is organized. The discussion will be moderated by Monika Sturm.