International IEEE Workshop on Service Oriented Architectures in Converging Networked Environments (SOCNE)

6th IEEE International Workshop on Service Oriented Architectures in Converging Networked Environments (SOCNE)
in conjunction with
16th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA’2011)
Toulouse, France, 05.-09. September, 2011

Frank Golutowski, University of Rostock
Lucia Lo Bello, University of Catania
Guido Moritz, University of Rostock
Christoph Niedermeier, SIEMENS
Michael Ditze, TWT Science and Innovation GmbH
Service-Oriented Architectures in Converging Networking Environments

- Networking Environments are converging in different domains
- Need for cross domain solution still exists: SOA?
- ITEA SIRENA project.
History of SOCNE

- 2004 Special Session
  - SS1: IEEE INDIN 2004, Berlin
- 2005 Special Session
  - SS2: IASTED PDCN 2005, Innsbruck
  - SS4: IEEE IECON 2005, Raleigh
- 2006 - Vienna, Austria, @IEEE AINA 1. SOCNE workshop
- 2007 - Niagara Falls, Canada
- 2008 - GinoWan, Okinawa, Japan
- 2009 - Bradford, UK
- 2010 - Perth, Australia
- 2011 - Toulouse, France, @IEEE ETFA 6. SOCNE workshop
Workshop Chairs
Frank Golatowski, University of Rostock, Germany
Lucia Lo Bello, University of Catania
Michael Ditze, TWT Science & Innovation
Christoph Niedermeier, Siemens, Germany

Publicity Chair
Guido Moritz, University of Rostock, Germany

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13. Stamatis Karnouskos, SAP, Germany
14. Heiko Krumm, TU Dortmund, Germany
15. Philippe Lalanda, IMAG, France
16. Marc Lohmann, Germany
17. Jianhua Ma, Hosei University, Japan
18. Thomas Nolte, Mälardalen University, Sweden
19. Raúl Otaolea, Tecnalia, Spain
20. Frank Reichenbach, ABB, Norway
21. Marc Roelands, Bell Labs, Belgium
22. Pedro M. Ruiz, Univ. of Murcia, Spain
23. Thilo Sauter, UAOW, Austria
24. Simon Schneider, Nokia Siemens, Germany
25. Axel Sikora, Uni of Applied Sciences Offenburg, GE
26. Harm Smit, Odonata, France
27. Roy Sterritt, University of Ulster, UK
28. Peter van der Stok, Philips, Netherlands
29. Jürgen Tacken, Orga Systems, Germany
30. Janusz Zalewski, Florida Gulf Coast University, USA
About this years SOCNE

• Topics addressed in this year:
  – Next generation networks, mobile systems and frameworks (telecom domain)
  – Smart home and building automation (home automation domain)
  – Networked medical devices, eHealth, AAL (medical domain)
  – Composition, Configuration, Management, Tooling (cross domain)

• Statistics:
  - 13 submissions
  – 9 accepted papers
  – 3-4 reviews per paper

• Future potential domains: medical, automotive, avionics, real-time
Roadmap:
SOA for embedded and real-time systems

- eHealth
- Mobile systems
- Building automation
- AAL
- Medical ???
- Automotive ???
- Avionics ???

- Embedded Services
- Scalable Embedded Services
- Real-Time embedded services
- Modular architecture Standard Interfaces
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<tr>
<th>Session 1</th>
<th>09:00 - 10:30</th>
<th>Lucia Lo Bello, University of Catania, Italy</th>
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<tr>
<td>09:00</td>
<td>Opening</td>
<td>Jan Krueger, OSAMI COMMONS - An open platform for dynamic services for ambient intelligence</td>
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<tr>
<td>09:15</td>
<td>09:40</td>
<td>Philippe Lalanda, Towards Autonomic Enterprise Service Bus</td>
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<tr>
<td>09:40</td>
<td>10:05</td>
<td>Marten Fischer, A New Approach for Automatic Generation of Tests for Next Generation Network Communication</td>
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<td>10:05</td>
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<td>10:30</td>
<td>11:00</td>
<td>Coffee break</td>
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<tr>
<th>Session 2</th>
<th>11:00 - 12:15</th>
<th>Guido Moritz, University of Rostock</th>
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<tr>
<td>11:00</td>
<td>11:25</td>
<td>Lars Lindemann, Integration of Medical Equipment into SOA: enabling Technology for efficient Workflow Management</td>
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<tr>
<td>11:25</td>
<td>11:50</td>
<td>Carsten Rust, User-Generated Mobile Services for Health and Fitness</td>
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<td>11:50</td>
<td>12:15</td>
<td>Andreas Kliem, Towards self-organization of networked medical devices</td>
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<td>12:30</td>
<td>14:00</td>
<td>Lunch break</td>
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<th>Session 3</th>
<th>14:00 - 15:15</th>
<th>Frank Golatowski, University of Rostock</th>
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<tr>
<td>14:00</td>
<td>14:25</td>
<td>Luis Lino Ferreira, Service Offloading in Adaptive Real-Time Systems</td>
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<tr>
<td>14:25</td>
<td>14:50</td>
<td>Elmar Zeeb, Requirements for Smart Home Applications and Realization with WS4D-PipesBox</td>
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<tr>
<td>14:50</td>
<td>15:15</td>
<td>Jan Krüger, Adaptive and Reliable Binding in Ambient Service Systems</td>
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<td>15:15</td>
<td>16:00</td>
<td>Closing workshop session</td>
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Session-1

SOCNE-1: Workshop on Service Oriented Architectures in Converging Networked Environments
Chair: Lucia Lo Bello
Room: Auriliac (9:00-10:30)

OSAMI COMMONS - An open platform for dynamic services for ambient intelligence
Naci Dai (ETERATION A.S); Jesus Bermejo (Telvent); Felix Cuadrado Latasa (Universidad Politecnica de Madrid); Alejandra Ruiz López (Tecnalia); Isaac Agudo (Universidad de Malaga); Elmar Zeeb (University of Rostock); Jan Krueger (University of Dortmund); Wolfgang Thronicke (Siemens); Oliver Dohndorf (TU Dortmund); Christoph Fiehe (Materna); Anna Litvina (Materna)

Autonomic Enterprise Service Bus
Philippe Lalanda (LIG, Grenoble); Denis Morand (Schneider Electric); Issac Garcia (LIG, Grenoble)

A New Approach for Automatic Generation of Tests for Next Generation Network Communication Services
Marten Fischer (University of Applied Science Osnabrueck); Ralf Tönjes (University of Applied Science Osnabrueck); Rolf Lasch (University of Applied Sciences Osnabrück)
SOCNE-2: Workshop on Service Oriented Architectures in Converging Networked Environments
Chair: Guido Moritz
Room: Auriliac (11:00-12:30)

Integration of Medical Equipment into SOA - enabling Technology for efficient Workflow Management
Lars Lindemann (Institut fuer Automation und Kommunikation e.V.); Mario Thron (Institut fuer Automation und Kommunikation e.V.); Thomas Bangemann (Institut fuer Automation und Kommunikation e.V.); Oliver Grosser (Universitaetsklinikum Magdeburg)

User-Generated Mobile Services for Health and Fitness
Alexandra Chapko (German Research Center for Artificial Intelligence); Marc Gräßle (German Research Center for Artificial Intelligence); Andreas Emrich (German Research Center for Artificial Intelligence); Dirk Werth (German Research Center for Artificial Intelligence); Carsten Rust (Morpho e-Documents); Jürgen Tacken (Orga Systems GmbH); Stephan Flake (Orga Systems GmbH); Nico Laum (University of Rostock); Christian Lerche (University of Rostock); Alexander Weber (Deutsches Lauftherapiezentrum e.V.)

Towards self-organization of networked medical devices
Joachim Hänsel (Fraunhofer Institute for Computer Architecture and Software Technology); Matthias Hovestadt (Technische Universitaet Berlin); Michael John (Fraunhofer Institute for Computer Architecture and Software Technology); Odej Kao (Technische Universitaet Berlin); Andreas Kliem (Technische Universitaet Berlin)
SOCNE-3: Workshop on Service Oriented Architectures in Converging Networked Environments
Chair: Frank Golatowski
Room : Auriliac (14:00-16:00)

Service offloading in Adaptive Real-Time Systems
Luis Lino Ferreira (CISTER Research Group/ISEP); Guilherme Silva (CISTER Research Group/ISEP); Luis Miguel Pinho (CISTER Research Group/ISEP)

Requirements for Smart Home Applications and Realization with WS4D-PipesBox
Elmar Zeeb (University of Rostock); Guido Moritz (University of Rostock); Christian Beckel (Robert Bosch GmbH); Heinz Serfas (Robert Bosch GmbH); Frank Golatowski (University of Rostock); Dirk Timmermann (University of Rostock)

Adaptive and Reliable Binding in Ambient Service Systems
Jan Krüger (TU Dortmund University); Oliver Dohndorf (TU Dortmund University); Heiko Krumm (TU Dortmund University); Christoph Fiehe (MATERNA Information & Communications); Anna Litvina (MATERNA Information & Communications); Ingo Lück (MATERNA Information & Communications); Franz-Josef Stewing (MATERNA Information & Communications)