SESOS 2016

http://sesos2016.icmc.usp.br
BRIEF HISTORY

• SESoS 2013 @ ECSA 2013 (Montpelier, France)
  • http://sesos2013.icmc.usp.br
• SESoS 2014 @ ECSA 2014 (Vienna, Austria)
  • http://sesos2014.icmc.usp.br
• SESoS 2015 @ ICSE 2015 (Florence, Italy)
  • http://sesos2015.icmc.usp.br
• SESoS 2016 @ ICSE 2016 (Austin, USA)
  • http://sesos2016.icmc.usp.br
MAIN GOAL OF SESoS

- **SoS:**
  - Increasingly complex and frequently used in highly distributed, dynamic, and open environments.

- **Why is the development/maintenance of SoS a challenge for SE?**

- **Characteristics of SoS:**
  - Managerial/operational independence of constituents
  - Distribution of constituents
  - Evolutionary development
  - Emergent behavior
MAIN GOAL OF SESoS

• Goal of SESoS:

Discuss on SE theories and tools needed to design, implement, operate, and even evolve such dynamic, complex software-intensive SoS.
ORGANIZERS

• Flavio Oquendo, IRISA - Univ. of South Brittany, France
• Paris Avgeriou, Univ. of Groningen, The Netherlands
• Carlos E. Cuesta, Rey Juan Carlos University, Spain
• Khalil Drira, LAAS-CNRS - Univ. of Toulouse, France
• Elisa Yumi Nakagawa, ICMC - Univ. of São Paulo, Brazil
• José Carlos Maldonado, ICMC - Univ. of São Paulo, Brazil
• Andrea Zisman, City University London, UK

Program Committee

• 31 members from 12 different countries
WORKSHOP PROGRAM

• 9:00 - 09:15      Opening and Presentation
• 9:15 - 10:30 - Invited Keynote Speaker
  • Prof. Dewayne Perry, Univ. of Texas, Austin, USA
  • Systems of Systems and Statically Defined Dynamic Architecture Evolution
• 10:30 - 11:00 - Coffee Break
• 11:00 - 12:30 - Technical Session I
• 12:30 - 14:00 - Lunch Break
• 14:00 - 15:30 - Technical Session II
• 15:30 - 16:00 - Coffee Break
• 16:00 - 17:30 - Working session
  • Working groups: Challenges for Engineering SoS
  • Plenary session: Challenges for Engineering SoS
• 17:30 - Closing
SoS Model-Based Engineering
Session chair: Elisa Yumi Nakagawa

  - Pontus Johnson, Robert Lagerström, Mathias Ekstedt, Ulrik Franke

- Modeling of Information Systems as Systems of Systems through DSM
  - Paolo Salvaneschi

- Modeling and Verification for Different Types of System of Systems using PRISM
  - Dongwon Seo, Donghwan Shin, Young-Min Baek, Jiyoung Song, Wonkyung Yun, Junho Kim, Eunkyoung Jee, Doo-Hwan Bae
TECHNICAL SESSION II

SoS Architecture
Session Chair: Pontus Johnson

• Building Dynamic, Long-Running Systems
  • Steven Reiss, Qi Xin

• ITE Arbitrator: A Reference Architecture Framework for Sustainable IT Ecosystems
  • Soojin Park, Young B. Park

• Approaches for Integration in System of Systems: A Systematic Review
  • Iohan Gonçalves Vargas, Thiago Gottardi, Rosana Braga
    (Presenter: Claudia Werner)
AUTHORS ORIGIN

• Country of the authors:
  • Brazil
  • Italy
  • Republic of Korea
  • Sweden
  • United States

• Papers from 8 different institutions
DISCUSSIONS

• Questions:
  • Main challenges to engineer SoS (?)
  • Evolution of SoS (?)
  • Relationship with other research areas (?)
  • Application domains (?)
  • …
ICSE
4th International Workshop on
Software Engineering for Systems-of-Systems
Austin, Texas, USA
Monday, May 16, 2016

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