AGERE! @ SPLASH 2014

4th International Workshop on Programming based on Actors, Agents, and Decentralized Control

http://soft.vub.ac.be/AGERE14/

SIGPLAN

Oct 20
Portland, Oregon - US
Organizer & PC Chairs

Elisa Boix Gonzalez - Vrije Universiteit, Brussel, Belgium
Philipp Haller - Typesafe
Alessandro Ricci - University of Bologna, Italy
Carlos Varela - Rensselaer Polytechnic Institute, NY, USA

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Amal El Fallah Segrouchni, LIP6, Paris, France
Takuo Watanabe, Tokyo Institute of Technology, Japan
Assaf Marron, Weizmann Institute of Science, Israel
Nadeem Jamali, University of Saskatchewan, Canada

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Alessandro Ricci, University of Bologna, Italy
āgo, āgis, egi, actum, āgēre
latin verb meaning “to act, to lead, to do”

common root for

actors
agents

the workshop is about computing & programming paradigms based on actor-oriented & agent-oriented abstractions

...and on any paradigm promoting a decentralized control mindset in design and programming
- programming languages
- computing & programming models and architectures
- platforms and tools
- applications
- design aspects & methodologies

OOPSLA’s topics but focusing on actors, agents and decentralized control approaches as programming paradigms evolution of the OOP one.
AGENDA

• 8:35 - 9:35 - Invited Talk
  ▸ Upgrade Programming for Mobile Cloud
    (Gul Agha)

• 9:35 - 10:00 - Full-paper Session I
  ▸ Selectors: Actors with Multiple Guarded Mailboxes
    (Shams Imam and Vivek Sarkar)
AGENDA

• 10:30 - 12:00 - Full-paper Session II
  ‣ Fault Tolerant Distributed Computing using Asynchronous Local Checkpointing
    (Phillip Kuang, John Field and Carlos A. Varela)
  ‣ Scaling-Up Behavioral Programming: Steps from Basic Principles to Application Architectures
    (David Harel and Guy Katz)
  ‣ Multiple Inheritance in AgentSpeak(L)-style Programming Languages
    (Dhaon Akshat and Rem Collier)
  ‣ From Actor Event-Loop to Agent Control-Loop - Impact on Programming
    (Alessandro Ricci)
AGENDA

13:30 - 15:00 - Full-paper Session III

- **CAF - The C++ Actor Framework for Scalable and Resource-efficient Applications**
  (Dominik Charousset, Raphael Hiesgen and Thomas Schmid)

- **An Automatic Actors to Threads Mapping Technique for JVM-based Actor Frameworks**
  (Ganesha Upadhyaya and Hridesh Rajan)

- **Event-based Analysis of Timed Rebeca Models using SQL**
  (Brynjar Magnusson, Ehsan Khamespanah, Marjan Sirjani and Ramtin Khosravi)

- **Efficient TCTL Model Checking Algorithm for Timed Actors**
  (Ehsan Khamespanah, Ramtin Khosravi and Marjan Sirjani)
AGENDA

• 15:30 - 16:00 - Short papers & posters advertisement
  ‣ Savina - An Actor Benchmark Suite
    (Shams Imam and Vivek Sarkar)
  ‣ Posters
    • Composita: Bringing Order to Agent Communications
      (Luc Bläser)
    • Modular Reasoning in Capsule
      (Mehdi Bagherzadeh and Hridesh Rajan)
    • Supporting Relative Location Constraints in Actor Systems
      (Hua Zhang, Xinghui Zhao and Nadeem Jamali)
AGENDA

• 16:00 - 16:50 - Brainstorm and discussion session
  ‣ open discussion about the papers and the topics of the day
  ‣ triggering new topics, issues, proposals

• 16:50 - 17:00 - Wrap-up and Closing remarks
  ‣ ACM DL
  ‣ special issue
  ‣ next AGERE!
PRESENTATIONS AND TIMING

• 4 full-papers in 90 minutes =>
  ‣ about 22 minutes for each paper
• 15-20 minutes for each paper + short questions
  ‣ full questions and discussion during the brainstorming session
• please send your slides to a.ricci@unibo.it
ENJOY

CONTRIBUTE