

The 17th ACM/IFIP/USENIX Middleware Conference December 12 – 16, 2016, Trento, Italy http://2016.middleware-conference.org/

The annual ACM/IFIP/USENIX Middleware conference is a major forum for the discussion of innovations and recent advances in the design, construction and use of middleware systems. The scope of the conference is the design, implementation, deployment, and evaluation of distributed system platforms and architectures for computing, storage, and communication environments. Highlights of the conference will include a high quality single-track technical program, invited speakers, an industrial track, poster and demonstration presentations, a doctoral symposium, and workshops.

Topics: The topics of the conference include, but are not limited to:

Platforms and Usage Models of Middleware for:

- Emerging cloud computing platforms, 5G, NFV
- Data-intensive computing (Big Data) and data analytics •
- IoT, Cyber Physical Systems, Smart Cities

Systems Issues for Middleware

- Reliability and fault tolerance
- Consistency, availability, and replication
- Energy- and power-aware techniques
- Security and privacy

Design Principles and Programming Support

- Event-based, pub/sub, and P2P solutions
- Reconfigurable, adaptable, and reflective approachesNovel programming abstractions and paradigms for
- Novel programming abstractions and paradigms for middleware

Original research papers of three types are sought on the above topics.

- a) Research Papers : Original research papers are sought on the above topics.
- b) Experimentation and Deployment Papers: These papers describe complete systems, platforms, and papers with comprehensive experimental evaluations of alternative designs and solutions to well-known problems. The emphasis during the evaluation of these papers will be less on the novelty and more on the demonstrated usefulness and potential impact of the contributions, the extensive experimentation involved, and the quality and weight of the lessons learned.
- c) **Big-Ideas Papers :** These are papers that have the potential for opening up new research directions. For such papers, the potential to motivate new research is more important than full experimental evaluation, though some preliminary evidence of the effectiveness of the approach or idea is important.

The Middleware 2016 conference proceedings will be published in the ACM Digital Library. Accepted submissions will be available on the ACM digital library at least one week before the conference. Submitted papers may have at most 12 pages of technical content, including text, figures, appendices, etc. In addition to the 12 pages allowed for technical content, a submission may include any number of additional pages of bibliographic references. Submitted papers should adhere to the formatting instructions of the ACM Style that you can find on the submission page and should clearly indicate their type on their first page. Please note that submissions are single-blind: authors' names should appear.

AUTHORS TAKE NOTE: The official publication date will be the date the proceedings are made available in the ACM Digital Library. This date may be up to two weeks prior to the first day of the Middleware conference. The official publication date affects the deadline for any patent filings related to published work.

The Middleware conference adopts a 2-phase review process in which the authors, after receiving a first set of reviews, have the opportunity to respond with a rebuttal to the reviewers' comments. This rebuttal is then visible to the additional reviewers in the second phase, and in general is taken into account into the paper selection process.

Important dates	
Abstract Submission	May 13 (Friday) *Firm Deadline*
Paper Submission	May 20 (Friday) *Firm Deadline*
Author Rebuttal	June 27 - June 29 (Monday-Wednesday)
Notification Due	Aug 15 (Monday)
Final Version Due	Sep 7, 2016 (To be Confirmed)

- Mobile devices and services
- Ubiquitous and pervasive computing
- Internet applications and multimedia
- Virtualization, auto-scaling, provisioning, and scheduling
- Real-time solutions and quality of service
- Scalability and performance
- Methodologies and tools for middleware design, implementation, verification, and evaluation
- Retrospective reviews of middleware paradigms, e.g, object models, aspect orientation, etc.

Organizers:

General Chair: Gian Pietro Picco, University of Trento, Italy

Technical Program Committee

Program Co-chairs: * Sonia Ben Mokhtar, LIRIS-CNRS, Lyon, France * Dejan Milojicic, Hewlett Packard Labs, Palo Alto, CA

reeninear r rogram eo			
Alvin AuYoung	Hewlett Packard Labs, USA	Fabio Kon	University of São Paulo, Brazil
Jean Bacon	Cambridge University, UK	Young-Woo Kwon	Utah State University, USA
Roberto Baldoni	University of Rome, La Sapienza, Italy	Danny B. Lange	Uber, USA
Gordon Blair	Lancaster University, UK	Julia Lawall	INRIA, France
Sara Bouchenak	INSA Lyon, France	Doug Lea	SUNY Oswego
Yérom-David Bromberg	IRISA, France	Zhenhua Li	Tsinghua University, China
Abhishek Chandra	University of Minnesota, USA	David Lomet	Microsoft Research, USA
Yuan Chen	Hewlett Packard Labs, USA	Joseph Loyall	BBN Technologies
Lucy Cherkasova	Hewlett Packard Labs, USA	Hong Mei	Shanghai Univ. & Peking Univ., China
Shigeru Chiba	The University of Tokyo, Japan	Alberto Montresor	University of Trento, Italy
Octav Chipara	University of Iowa, USA	Jeff Morgan	Samsung Research America, USA
Angelo Corsaro	Prismtech	Amy L. Murphy	Bruno Kessler Foundation, Italy
Zoran Dimitrijevic	Altiscale, Palo Alto, USA	Mirco Musolesi	University College London, UK
Fred Douglis	EMC	Gabriel Parmer	GDW
Tudor Dumitras	University of Maryland, USA	Fernando Pedone	University of Lugano, Switzerland
David Eyers	University of Otago, New Zeland	Peter Pietzuch	Imperial College London, UK
Pascal Felber	University of Neuchâtel, Switzerland	Johan Pouwelse	Delft University of Technology, Netherlands
Paulo Ferreira	INESC ID / University of Lisbon, Portugal	Vivien Quéma	Grenoble INP, France
Christof Fetzer	TU Dresden, Germany	Binoy Ravindran	Virginia Tech, USA
Ian Foster	Argonne National Lab/ Univ. Chicago, USA	Laurent Réveillère	Bordeaux INP, France
Davide Frey	INRIA, France	Etienne Rivière	University of Neuchâtel, Switzerland
Roy Friedman	Technion, Israel	Luis Rodrigues	INESC-ID, IST, U Lisboa, Portugal
Gang Huang	Peking University, China	Romain Rouvoy	University of Lille 1 / Inria, France
Benoît Garbinato	Université de Lausanne, Switzerland	Rick Schlichting	AT&T Labs
Rachid Guerraoui	EPFL, Switzerland	Jatinder Singh	University of Cambridge, UK
Abhishek Gupta	Intel Corp.	Robert Soulé	Università della Svizzera italiana, Italy
Franz J. Hauck	Ulm University, Germany	Mike Spreitzer	IBM Research, USA
Cheng-Hsin Hsu	National Tsing Hua University, Taiwan	François Taïani	Univ. Rennes 1/IRISA/ESIR, INRIA, France
Kevin Huguenin	LAAS, CNRS, France	Eli Tilevich	Virginia Tech, USA
Valerie Issarny	INRIA, France	Peter Triantafillou	University of Glasgow, UK
Arun Iyengar	IBM Research	Robbert Van Renesse	Cornell University, USA
Hans-Arno Jacobsen	University of Toronto, Canada	Maarten van Steen	University of Twente, Netherlands
Mark Jelasity	University of Szeged, Hungray	Nalini Venkatasubramanian	University of California, Irvine, USA
Rüdiger Kapitza	TU Braunschweig, Germany	Luís Veiga	INESC-ID / Inst. Superior Técnico, Portugal
Bettina Kemme	McGill University, Canada	Steve Vinoski	Arista Networks, Nashua, NH, USA
Anne-Marie Kermarrek	INRIA, France	Timothy Wood	George Washington University, USA