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Middleware 2013

ACM/IFIP/USENIX

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Proceedings



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Preface

This edition marks the 14th ACM/IFIP/USENIX Middleware Conference. The conference has an increasingly long history, with the first event being held in 1998, in the Lake District of England. At that time, the growing significance of middleware technology was recognized, as was the need to support the active, rigorous, expanding, and evolving research discipline coupled with the middleware technology. The definition of the term “middleware” has also evolved significantly over time, but retains, at its core, the notion of different levels and layers of abstraction in distributed-computing systems. Cloud computing, and other topics connected to increasingly massive distributed systems, are helping maintain an increasing pace of middleware evolution. As always, the Middleware Conference aims to be a premier forum for the discussion of innovations and recent advances in all aspects of middleware systems.

The 2013 Middleware Conference included a variety of papers spanning the design, implementation, deployment, and evaluation of middleware for next-generation platforms such as cloud computing, social networks, and large-scale storage and distributed systems. The middleware solutions introduced provide features such as availability, efficiency, scalability, fault-tolerance, trustworthy operation, and support security and privacy needs.

The research track of the conference this year reflected a very strong technical program, with 24 papers accepted out of 189 submissions. The papers were judged based on originality, contribution, presentation quality, relevance to the conference, and potential impact on the field. The reviewing process again included an author feedback phase, which stimulated discussion within the Program Committee. We accepted “big ideas” and “systems and experience” papers as well as normal research submissions. This year, three of the accepted research track papers are “systems and experience” papers. The main program additionally included six high-quality submissions from the industry track. We were also delighted to provide an opportunity for a retrospective discussion from the authors of the paper deemed to have had highest impact from the program 10 years ago, in this case on the topic of peer-to-peer keyword searching.

The program also included workshops on topics such as adaptive/reflective middleware; cloud-enabled sensing; middleware modeling and evaluation; and cloud monitoring and management. Other important events within the conference included a significantly expanded poster and demonstration session, and a set of three tutorials. Finally, to help mentor the next generation of middleware researchers, the conference continued its long-running doctoral symposium.

It is our privilege to have had the opportunity to serve as the Program Chairs of the 2013 Middleware Conference and we would like to thank everyone who made the conference so successful. The Organizing Committee provided excellent support throughout the preparation of the conference—their many and varied

roles are listed after this preface. The General Chairs, Gang Huang and Rick Schantz, consistently provided support that we greatly appreciated. The Program Committee did a thorough job of evaluating the submissions. The Steering Committee provided critical advice and insight, always provided in a timely manner—particular thanks is owed to the Steering Committee Chair, Gordon Blair. Last but not least, we would like to thank all of the authors—the outstanding quality of the papers within the 2013 ACM/IFIP/USENIX Middleware Conference represents significant, high-impact work that will provide an enduring contribution to the middleware research field.

December 2013

David Eysers
Karsten Schwan

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