9th International Workshop on Self-Managing Database Systems (SMDB 2014)

March 31, 2014
Chicago, USA

in conjunction with the
2014 IEEE 30th International Conference on Data Engineering (ICDE 2014)

March 31 – April 4, 2014
FOREWORD

It is our great pleasure to welcome you to the 9th International Workshop on Self-Managing Database Systems (SMDB), held in conjunction with ICDE 2014. SMDB continues its tradition of being a premier meeting that brings together industry and academia to advance research in the area of self-management and autonomic database systems.

Autonomic, or self-managing, systems are a promising approach to achieve the goal of systems to be easier to use, simpler to maintain, and more robust in their operating characteristics. A system is considered to be autonomic if it is self-configuring, self-optimizing, self-healing, and/or self-protecting. The aim of the SMDB workshop is to provide a forum for researchers from both industry and academia to present and discuss ideas and experiences related to self-management and self-organization in all areas of Information Management in general. SMDB targets not only classical database systems, but also the new generation of storage engines such as column stores, key-value stores, and in-memory databases. Beyond databases, SMDB aims to cover autonomic aspects of data-intensive systems represented by large-scale map-reduce and cloud environments, where much work on self-management is needed.

The program of SMDB’14 includes 6 high-quality papers, which cover a range of topics such as efficient and personalized data storage, interactive data exploration, elastic data management in the cloud, and continuous processing of data streams. Each paper received a careful review by four members of the program committee. We hope that these proceedings serve as a valuable reference for researchers and developers.

The SMDB’14 program features a keynote speech by Amr Awadallah from Cloudera titled: “Evolution from Apache Hadoop to the Enterprise Data Hub: A new Foundation for the Modern Information Architecture”. The program also includes three invited talks given by industry experts: one by Guy Lohman from IBM Research, with title “Less is More – Why Automated Tools Don't Simplify the User Experience”, one by Tomas Talius from Microsoft, with title “Experiences in Running Windows Azure SQL Database Service”, and another by Ben Vandiver from HP Vertica, with title “Flexible Tables – Where SQL meets Semi-structured Data”.

Many people have contributed to the successful organization of SMDB’14. We thank the authors for providing the content of the program. We owe our sincere gratitude to the members of the Technical Program Committee for their excellent work in reviewing the papers and providing valuable feedback under a tight deadline. Our special thanks go to the members of the Executive Committee of the “TCDE Workgroup on Self-Managing Database Systems”, especially Shivnath Babu and Panos K. Chrysanthis for their support throughout the workshop organization. We would also like to thank the ICDE’14 Workshops co-chairs, for their guidance and support.

Special thanks go to our invited speakers: Amr Awadallah, Guy Lohman, Tomas Talius, and Ben Vandiver. We would also like to thank the University of Queensland for hosting the workshop website and Abdullah Albarrak, our SMDB’14 web master. Finally, special thanks go to HP Vertica and Microsoft Research for their generous sponsorships.

We sincerely hope that you will enjoy the papers presented and that this workshop will provide an opportunity to stimulate interactions among the leading researchers and practitioners from academia and industry.

Herodotos Herodotou and Mohamed A. Sharaf

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