June 14 –19, 2020
Portland, OR, USA

Association for Computing Machinery

Advancing Computing as a Science & Profession

SIGMOD'20

Proceedings of the 2020 ACM SIGMOD International Conference on Management of Data

Sponsored by:

ACM SIGMOD

General Chairs:

David Maier (Portland State University, USA)
Rachel Pottinger (University of British Columbia, Canada)

Program Chairs:

AnHai Doan (University of Wisconsin, USA)
Wang-Chiew Tan (Megagon Labs, USA)

Proceedings Chairs:

Abdussalam Alawini (University of Illinois at Urbana-Champaign, USA)
Hung Q. Ngo (RelationalAI, USA)

Association for Computing Machinery

Advancing Computing as a Science & Profession

The Association for Computing Machinery
1601 Broadway, 10th Floor
New York, NY 10019-7434

ISBN: 978-1-4503-6735-6

Additional copies may be ordered prepaid from:

ACM Order Department
PO Box 30777
New York, NY 10087-0777, USA

Phone: 1-800-342-6626 (USA and Canada)
+1-212-626-0500 (Global)
Fax: +1-212-944-1318
E-mail: acmhelp@acm.org
Hours of Operation: 8:30 am – 4:30 pm ET

Printed in the USA

Welcome to SIGMOD 2020 — The 2020 ACM SIGMOD International Conference on the Management of Data!

This year, SIGMOD is heading for a new frontier and is being held entirely online, instead of at its originally planned location of Portland, Oregon, USA. The influence of that location is still a bit evident, in the logo and in the schedule, which uses the Pacific time zone. Despite the challenging times that we find ourselves in, we have an exciting program with many more papers than previous SIGMODs. We have tried to maintain as many program elements as possible: technical and industrial talks, keynotes, tutorials, panels, demonstrations, and the awards session.

We are using the latest technologies to keep SIGMOD as vibrant as previous SIGMODs, and we will be archiving more of SIGMOD than for past conferences, for those who want to review the talks and other sessions at a later date.

In the Research Track this year, we received 458 research submissions (159 for Round 1 and 299 for Round 2), which were extensively reviewed by 168 program committee members, 17 area chairs, and the help of several external reviewers. We accepted 123 submissions (a 26.9% acceptance rate).

In addition, with the approval of SIGMOD EC, we introduced a new category called "short paper". This new category showcases interesting ongoing work, new discoveries, insights or experience, summaries of significant projects, and interdisciplinary work. Short papers might not possess the journal-like quality that reviewers often expect of papers in the regular research category, but they cover interesting work that we (and the reviewers and area chairs) believe should be brought to the wider community's attention now, to rapidly advance the field. After a rigorous reviewing process, we ended up accepting 21 more papers as short papers.

In addition to the Research Track, the Industrial Track selected 21 papers from 48 submissions; the Demonstration Track selected 36 demonstrations out of 100 submissions; the Tutorial Track selected 8 tutorials from 19 submissions; the Student Research Competition selected 19 from 36 submissions; and the Programming Contest selected 5 finalists from 41 submissions.

This year, we will have three exciting keynote talks, reflecting emerging topics of great interest to the data management community: "Systems and ML: When the Sum is Greater than Its Parts" by Ion Stoica (UC Berkeley), "When the Web is your Data Lake: Creating a Search Engine for Datasets on the Web" by Natasha Noy (Google), and "The Challenge of Building Effective, Enterprise-scale Data Lakes" by Awez Syed (Databricks).

In addition, we will have a timely and interesting plenary panel, organized by Surajit Chaudhuri (Microsoft) and Magdalena Balazinska (Univ. of Washington), on "The Next 5 Years: What Opportunities Should the Database Community Seize to Maximize its Impact?". There is also an industrial panel on startups founded by database researchers, organized by C. Mohan (IBM Almaden Research Center), probably the first such panel for SIGMOD conferences. The panelists will discuss the trials and tribulations of their entrepreneurial efforts, what worked and

what did not, and cover other topics on startups, spanning early-stage to successfully exited ones, both in the USA and Europe.

Thus, SIGMOD 2020 will feature an exciting and rich program, with 144 research papers, 21 industrial papers, 36 demonstrations, 8 tutorials, 3 keynotes, and 2 panels, together with online social and sponsor events (which are being organized as of the writing of this note). Assembling this program and these proceedings requires an immense amount of effort from numerous people, to whom we are very grateful. We thank the members of the SIGMOD organizing committee and the PC members of the various programs, as well as the staff and volunteers, for doing an outstanding job and going above and beyond what was required. We have been extremely heartened by the level of dedication and professionalism we have seen in the course of organizing SIGMOD 2020, especially during this challenging time.

We are also very grateful to the SIGMOD Executive Committee, as well as former SIGMOD PC chairs, for helping us navigate many issues and for supporting our new initiatives. We thank ACM and Sheridan, especially Lisa Tolles, for helping us put together the proceedings. We are also deeply appreciative of the support team behind Microsoft's Conference Management Toolkit, who has always been prompt and helpful in answering our questions. Finally, we are extremely grateful to all of our sponsors and supporters. Your continuing backing for our community and for SIGMOD is deeply appreciated.

Welcome to SIGMOD 2020. We hope you will enjoy the conference, and see you online!

David Maier
Rachel Pottinger
General Chairs

AnHai Doan
Wang-Chiew Tan
Program Chairs

Abdussalam Alawini
Hung Q. Ngo
Proceedings Chairs

Table of Contents

Research 4: Uncertain, Probabilistic, and Approximate Data

Industry 1: Graph Databases and Knowledge Bases

SIGMOD Panel

Research 5: Data Provenance

Research 6: Transaction Processing and Query Optimization

Research 7: Security, Privacy, and Blockchain

Research 9: Data Cleaning

Research 10: Storage and Indexing

Research 11: Machine Learning for Databases II

Research 12: Graph Matching and Discovery

Research 13: Data Matching

Research 14: Query Optimization and Execution

Research 15: Machine Learning for Cleaning, Integration, and Search

Research 16: Graph and Stream Processing

Industry 3: Cloud and Distributed Databases

Research 17: Data Exploration and Preparation

Research 18: Main Memory Databases and Modern Hardware

Research 19: Machine Learning Systems and Applications

Research 20: Graph Data Management and Analysis

Research 21: Spatial, Temporal, and Multimedia Data I

Award Talks

Research 22: Data Lakes, Web, and Knowledge Graph

Research 23: OLAP, Data Warehouses, and Key-Value Stores

Research 24: Spatial, Temporal, and Multimedia Data II

Research 25: Social Network Analysis

Research 27: Distributed and Parallel Processing

Research 28: Stream Processing

Research 29: Data Mining and Similarity Search

Tutorials

Demonstrations

Student Abstracts

SIGMOD 2020 Organization

General Chairs:	David Maier (Portland State University, USA) Rachel Pottinger (University of British Columbia, Canada)
Program Chairs:	AnHai Doan (University of Wisconsin, USA) Wang-Chiew Tan (Megagon Labs, USA)
Proceedings Chairs:	Abdussalam Alawini (University of Illinois at Urbana-Champaign, USA) Hung Q. Ngo (RelationalAI, USA)
Tutorial Chairs:	Bettina Kemme (McGill University, Canada) Felix Naumann (Hasso Plattner Institute, Germany)
Workshop Chairs:	Ihab Ilyas (University of Waterloo, Canada) Angela Bonifati (Lyon 1 University, France) Aditya Parameswaran (University of California, Berkeley)
Student Research Competition Chairs:	Xi He (University of Waterloo, Canada) Eugene Wu (Columbia University, USA)
New Researcher Symposium Chairs:	Spyros Blanas (The Ohio State University, USA) Azza Abouzzied (NYU Abu Dhabi, UAE)
SIGMOD Programming Contest Chairs:	Donatella Firmani (Roma Tre University, Italy) Andrea De Angelis (Roma Tre University, Italy) Maurizio Mazzei (Roma Tre University, Italy) Federico Piai (Roma Tre University, Italy)
Community Initiatives Chair:	Eduard Dragut (Temple University, USA)
Local Organization Chair:	Kristin Tufte (Portland State University, USA)
SIGMOD Local Arrangement Vice-Chairs:	Mohamed Ali (UW Tacoma, USA) Min Chen (UW Bothell, USA) Dejing Dou (University of Oregon, USA)
Sponsorship Chairs:	Tilmann Rabl (HPI, University of Potsdam, Germany) Bill Howe (University of Washington, USA)
Mentorship Chairs:	Qiong Luo (HKUST, China) Tiaanzheng Wang (Simon Fraser University, Canada)
Finance Chair:	Jennie Rogers (Northwestern University, USA)
Registration Chair:	Shawn Bowers (Gonzaga University, USA)
Web/Information Chair:	Wendy Hui Wang (Stevens Institute of Technology, USA)

Publicity Chairs: Leilani Battle (University of Maryland, USA)
Lukasz Golab (University of Waterloo, Canada)

Exhibit Chair: Rafael Fernandez-Moctezuma (Google Inc., USA)

Demonstration and Workshop Local Arrangements Chair: Arash Termehchy (Oregon State University, USA)

Conference Logistics: John Lateulere (Integrated Management Solutions, Conference Management, USA)

Communication Chair: Mostafa Milani (University of British-Columbia, Canada)

Program Committee Area Chairs: Aditya G Parameswaran (UC Berkeley, USA)
Andrew Pavlo (Carnegie Mellon University, USA)
Anthony Tung (National University of Singapore, Singapore)
Evimaria Terzi (Boston University, USA)
Gerome Miklau (University of Massachusetts Amherst, USA)
Jeff Naughton (Google, USA)
Jeffrey Xu Yu (Chinese University of Hong Kong, China)
Jens Dittrich (Saarland University, Germany)
Johannes Gehrke (Microsoft, USA)
Kian-Lee Tan (National University of Singapore. Singapore)
Neoklis Polyzotis (Google, USA)
Pinar Tozun (ITU, Denmark)
Prithviraj Sen (IBM Almaden Research Center, USA)
Renée J. Miller (Northeastern University, USA)
Tamer Ozsu (University of Waterloo, Canada)
Tova Milo (Tel Aviv University, Israel)
Yunyao Li (IBM Almaden Research Center, USA)

Program Committee: Aaron J Elmore (University of Chicago, USA)
Abdussalam Alawini (University of Illinois at Urbana-Champaign, USA)
Alan Fekete (University of Sydney, Australia)
Alex Beutel (Google, USA)
Alexander Boehm (SAP SE, Austria)
Alexandra Meliou (University of Massachusetts Amherst, USA)
Alexandros Labrinidis (University of Pittsburgh, USA)
Alin Deutsch (UCSD, USA)
Alvin Cheung (UC Berkeley, USA)
Anja Gruenheid (Google Inc., USA)
Antonios Deligiannakis (Technical University of Crete, Greece)
Arijit Khan (Nanyang Technological University, Singapore)
Aristides Gionis (Aalto University, Finland)
Arun Kumar (University of California, San Diego, USA)

Program Committee (continued):

Arvind Arasu (Microsoft, USA)
Ashraf Aboulnaga (Qatar Computing Research Institute, Qatar)
Assaf Schuster (Technion, Israel)
Avigdor Gal (Technion, Israel)
Avrilia Floratou (Microsoft, USA)
Babak Salimi (University of Washington, USA)
Badrish Chandramouli (Microsoft, USA)
Bailu Ding (Microsoft Research, USA)
Beng Chin Ooi (NUS, Singapore)
Bill Howe (University of Washington, USA)
Bin Cui (Peking University, China)
Bingsheng He (National University of Singapore, Singapore)
Bolin Ding (Data Analytics and Intelligence Lab, Alibaba Group, USA)
Boon Thau Loo (University of Pennsylvania, USA)
Boris Glavic (Illinois Institute of Technology, USA)
Byron Choi (Hong Kong Baptist University, SAR China)
Çağatay Demiralp (Megagon Labs, USA)
Carsten Binnig (TU Darmstadt, Germany)
Ce Zhang (ETH, Switzerland)
Chen Chen (Megagon Labs, USA)
Chen Li (UC Irvine, USA)
Chengkai Li (The University of Texas at Arlington, USA)
Chris De Sa (Cornell, USA)
Chris Jermaine (Rice University, USA)
Christoph Koch (EPFL, Switzerland)
Chuan Lei (IBM Research - Almaden, USA)
Cong Yu (Google, USA)
Da Yan (University of Alabama at Birmingham, USA)
Daisy Zhe Wang (University of Florida, USA)
Daniel Kifer (Pennsylvania State University, USA)
Danica Porobic (Oracle, USA)
Daniel Deutch (Tel Aviv University, Israel)
Dimitris Papadias (HKUST, China)
Doug Burdick (IBM Research, USA)
Eduard Dragut (Temple Univ., USA)
Erhard Rahm (University of Leipzig, Germany)
Faisal Nawab (UC Santa Cruz, USA)
Feifei Li (University of Utah, USA)
Felix Schuhknecht (Saarland University, Germany)
Flip Korn (Google, USA)
Florin Rusu (UC Merced, USA)
Gabriela Jacques-Silva (Facebook, USA)
Gao Cong (Nanyang Technological University, Singapore)

Program Committee (continued):

Gautam Das (University of Texas at Arlington, USA)
Georgios Fakas (Uppsala University, Sweden)
George Kollios (Boston University, USA)
Gerhard Weikum (Max-Planck-Institut fur Informatik, Germany)
Glenn M Fung (American Family Insurance, USA)
Goetz Graefe (Google, USA)
Goncalo Simoes (Google, USA)
Graham Cormode (University of Warwick, UK)
Guoliang Li (Tsinghua University, China)
Haixun Wang (WeWork Research, USA)
Han Li (Amazon, USA)
Holger Pirk (Imperial College, UK)
Huanchen Zhang (Carnegie Mellon University, USA)
Immanuel Trummer (Cornell, USA)
Ippokratis Pandis (Amazon, USA)
James Cheng (CUHK, Hong Kong)
Jana Giceva (Imperial College London, UK)
Jennie Rogers (Northwestern University, UK)
Jens Teubner (TU Dortmund University, Germany)
Jian Pei (Simon Fraser University, Canada)
Jiannan Wang (Simon Fraser University, Canada)
Jignesh Patel (UW - Madison, USA)
Jinfeng Li (Megagon Labs, USA)
Jose M Faleiro (UC Berkeley, USA)
Joy Arulraj (Georgia Tech, USA)
Ju Fan (Renmin University of China, China)
Jun Yang (Duke University, USA)
Justin Levandoski (Amazon Web Services, USA)
Karthik Ramachandra (Microsoft Gray Systems Lab, USA)
Kaushik Chakrabarti (Microsoft Research, USA)
Ke Yi (Hong Kong University of Science and Technology, Hong Kong)
Khuzaima Daudjee (University of Waterloo, Canada)
Kyuseok Shim (Seoul National University, South Korea)
Laks V.S. Lakshmanan (The University of British Columbia, Canada)
Leilani Battle (University of Maryland, USA)
Li Xiong (Emory University, USA)
Makoto Onizuka (Osaka University, Japan)
Manos Athanassoulis (Boston University, USA)
Marco Serafini (University of Massachusetts Amherst, USA)
Matthias Boehm (Graz University of Technology, Austria)
Michael Hay (Colgate University, USA)
Mirek Riedewald (Northeastern University, USA)
Mohamed Mokbel (University of Minnesota - Twin Cities, USA)

Program Committee (continued):

Mohammad Sadoghi (University of California-Davis, USA)
Mourad Ouzzani (Qatar Computing Research Institute, Qatar)
Nan Tang (Qatar Computing Research Institute, Qatar)
Nesime Tatbul (Intel Labs and MIT, USA)
Nick Koudas (University of Toronto, Canada)
Nikita Bhutani (Megagon Labs, USA)
Nikos Mamoulis (University of Ioannina, Greece)
Oliver A Kennedy (University at Buffalo, SUNY, USA)
Orestis Polychroniou (Amazon, USA)
Paolo Papotti (Eurecom, France)
Paraschos Koutris (University of Wisconsin-Madison, USA)
Paul Suganthan (Google, USA)
Peter Alvaro (UC Santa Cruz, USA)
Peter Boncz (CWI, Netherlands)
Peter Pietzuch (Imperial College London, UK)
Pradap Konda (Facebook, USA)
Qiong Luo (Hong Kong University of Science & Technology, China)
Raghav Kaushik (Microsoft, USA)
Raymond Chi-Wing Wong (Hong Kong University of Science & Technology, China)
Rebecca Taft (Cockroach Labs, USA)
Renata Borovica-Gajic (University of Melbourne, Australia)
S. Sudarshan (IIT Bombay, India)
Sanjay Krishnan (University of Chicago, USA)
Sara Cohen (The Hebrew University of Jerusalem, Israel)
Saravanan Thirumuruganathan (QCRI, Qatar)
Sebastian Schelter (New York University, USA)
Semih Salihoglu (University of Waterloo, Canada)
Sergey Melnik (Google, USA)
Sharad Mehrotra (UC Irvine, USA)
Shivaram Venkataraman (University of Wisconsin-Madison, USA)
Sidharth Mudgal (Google, USA)
Slava Novgorodov (eBay Research, Israel)
Sourav S Bhowmick (Nanyang Technological University, Singapore)
Sriram Rao (Microsoft, USA)
Steven Whang (KAIST, South Korea)
Stratos Idreos (Harvard, USA)
Sudeepa Roy (Duke University, USA)
Sudip Roy (Google, USA)
Sudipto Das (Amazon Web Services, USA)
Themis Palpanas (Paris Descartes University, France)
Theodoros Rekatsinas (University of Wisconsin-Madison, USA)
Thomas Neumann (TUM, Germany)

Program Committee (continued):

Tim Kraska (MIT, USA)
Vagelis Hristidis (UC Riverside, USA)
Viktor Leis (Friedrich Schiller University Jena, Germany)
Vivek Narasayya (Microsoft Research, USA)
Walid Aref (Purdue Univ., USA)
Wei Wang (University of New South Wales, Australia)
Wei-Shinn Ku (Auburn University, USA)
Wenfei Fan (University of Edinburgh, UK & Beihang Univ., China)
Wentao Wu (Microsoft Research, USA)
Wolfgang Gatterbauer (Northeastern University, USA)
Xi He (University of Waterloo, Canada)
Xi Wu (Google, USA)
Xiangyao Yu (MIT, USA)
Xiaokui Xiao (National University of Singapore, Singapore)
Xiaolan Wang (University of Massachusetts Amherst, USA)
Xu Chu (GATECH, USA)
Xuemin Lin (University of New South Wales, Australia)
Yael Amsterdamer (Bar-Ilan University, Israel)
Yannis Katsis (IBM Research Almaden, USA)
Yannis Velegrakis (Utrecht University, Netherlands)
Yeye He (Microsoft Research, USA)
Yongjoo Park (University of Michigan, USA)
Yash Govind (University of Wisconsin - Madison, USA)
Yuanyuan Tian (IBM Research - Almaden, USA)
Yuliang Li (UC San Diego, USA)
Ziawasch Abedjan (TU Berlin, Germany)

External Program Committee:

Michael Abebe (University of Waterloo, Canada)
Muhammad Abu Bakar Siddique (UC Riverside, USA)
Darshana Balakrishnan (University at Buffalo, SUNY, USA)
Dmytro Bogatov (Boston University, USA)
Tianwen Chen (The Hong Kong University of Science & Technology, China)
Yannis Chronis (University of Wisconsin, USA)
Anthony Colas (University of Florida, USA)
Shaleen Deep (University of Wisconsin, USA)
Jialin Ding (MIT, USA)
Karima Echihabi (IRDA - Rabat IT Center & ENSIAS - Mohammed V University, Morocco)
Yixiang Fang (The University of New South Wales, Australia)
Anna Fariha (University of Massachusetts Amherst, USA)
Dhrubjyothi Ghosh (UC Irvine, USA)
Brad Glasbergen (University of Waterloo, Canada)

External Program Committee (continued):

Paul Grubbs (Cornell University, USA)
Guimu Guo (The University of Alabama at Birmingham, USA)
Peeyush Gupta (UC Irvine, USA)
Surabhi Gupta (Microsoft Research, India)
Zsolt Istvan (IMDEA Software Institute, Spain)
Fuad Jamour (UC Riverside, USA)
Nikos R. Katsipoulakis (Amazon.com, USA)
Jongik Kim (Jeonbuk National University, Korea)
Taewoo Kim (Microsoft, USA)
Longbin Lai (Alibaba Group, USA)
Qingcan Li (Simon Fraser University, Canada)
Hao Liu (The Hong Kong University of Science and Technology, China)
Brandon Lockhart (Simon Fraser University, Canada)
Merlin Mao (UC Riverside, USA)
Ryan Marcus (MIT, USA)
Aisha Mohamed (Qatar Computing Research Institute, Qatar)
JuHyoung Mun (Boston University, USA)
Matthaios Olma (Microsoft, USA)
Jianglin Peng (Simon Fraser University, Canada)
Changbo Qu (Simon Fraser University, Canada)
Ryan Rivas (UC Riverside, USA)
Miguel Rodriguez (University of Florida, USA)
Ali Sadeghian (University of Florida, USA)
Subhadeep Sarkar (Boston University, USA)
Zeyuan Shang (MIT, USA)
Shantanu Sharma (UC Irvine, USA)
Mohamed Sharaf (United Arab Emirates University, UAE)
Anatoli Shein (Vertica, USA)
Michael Shekelyan (University of Warwick, UK)
Panos Simatis (HKUST, China)
William Spoth (University at Buffalo, SUNY, USA)
Dimitris Tsaras (HKUST, China)
Kai Wang (The University of New South Wales, Australia)
Pei Wang (Simon Fraser University, Canada)
Weicheng Wang (The Hong Kong University of Science and Technology, China)
Xiaoying Wang (Simon Fraser University, Canada)
Yifan Wang (University of Florida, USA)
Xiaoyang Wang (Zhejinag Gongshang University, China)
Victor Junqiu Wei (Noah's Ark Lab, Huawei Technologies, China)
Dong Wen (The Sydney University of Technology, Australia)
Min Xie (Shenzhen Institute of Computing Sciences, China)
Zhengyi Yang (The University of New South Wales, Australia)

External Program Committee (continued):
Xiaotian You (The Hong Kong University of Science & Technology, China)
Kai Zeng (Alibaba, USA)
Fan Zhang (Guanzhong University, China)
Zichen Zhu (Boston University, USA)
Kostas Zoumpatianos (Harvard University, USA & University of Paris, France)

Industrial Track PC Chairs:
C. Mohan (IBM Research - Almaden, USA)
Divesh Srivastava (AT&T Labs, USA)

Industrial Track PC Members:
Alan Halverson (Microsoft, USA)
Alexander Boehm (SAP SE, Germany)
Alon Halevy (Facebook, USA)
Anastasia Ailamaki (EPFL and RAW Labs, Switzerland)
Calisto Zuzarte (IBM Canada)
Eric Simon (SAP, France)
Eva Sitaridi (Amazon, USA)
Georgia Koutrika (Athena Research Center, Greece)
Georgios Giannikis (Oracle Labs, Switzerland)
Hamid Pirahesh (IBM Research, USA)
Jun Rao (Confluent, USA)
Kristen Lefevre (Google, Switzerland)
Latha Colby (Sigma Computing, USA)
Lyublena Antova (Datometry, USA)
Mahashweta Das (Visa Research, USA)
Martin Kersten (CWI, Netherlands)
Matei Zaharia (Stanford and Databricks, USA)
Michaela Hardt (Amazon, USA)
Nicolas Bruno (Microsoft, USA)
Rajeev Rastogi (Amazon, India)
Rick Cole (Tableau, USA)
Sameep Mehta (IBM Research, India)
Tamraparni Dasu (AT&T Labs - Research, USA)
Vijayshankar Raman (Google, USA)
Vladislav Shkapenyuk (AT&T Labs - Research, USA)

Demonstration Track PC Chairs:
Sihem Amer-Yahia (Laboratoire d'Informatique de Grenoble, France)
Tilmann Rabl (HPI, University of Potsdam, Germany)

Demonstration Track PC Members:
Alessandro Margara (Politecnico di Milano, Italy)
Andras Benczur (Hungarian Academy of Sciences, Hungary)
Asterios Katsifodimos (TU Delft, Netherlands)
Behrooz Omidvar-Tehrani (NAVER LABS Europe, France)
Beng Chin Ooi (NUS, Singapore)

Demonstration Track PC Members (continued):
Chen Xu (East China Normal University, China)
Chengkai Li (UT Arlington, USA)
Christoph Koch (EPFL, Switzerland)
Chunyang Ye (Chinese Academy of Sciences, China)
Cong Yu (Google, USA)
Emanuel Zgraggen (MIT, USA)
Evaggelia Pitoura (University of Ioannina, Greece)
Fei Chiang (McMaster University, Canada)
George Fletcher (TU Eindhoven, Netherlands)
Georgia Koutrika (Athena Research Center, Greece)
Ioana Manolescu (INRIA Saclay, France)
Jiang Lilong (Twitter, USA)
Jonas Traub (Technische Universität Berlin, Germany)
Kaiwen Zhang (ETS Montreal, Canada)
Khuzaima Daudjee (University of Waterloo, Canada)
Marco Serafini (University of Massachusetts Amherst, USA)
Matthias Uflacker (Hasso Plattner Institute, Germany)
Maya Ramanath (IIT Delhi, India)
Meikel Poess (Oracle, USA)
Michael Carey (UC Irvine, USA)
Michael Grossniklaus (University of Konstanz, Germany)
Mohammad Sadoghi (University of California, Davis, USA)
Panagiotis Bouros (Johannes Gutenberg University Mainz, Germany)
Panagiotis Karras (Aarhus University, Denmark)
Saravanan Thirumuruganathan (QCRI, Qatar)
Seif Haridi (KTH, Sweden)
Senjuti Basu Roy (New Jersey Institute of Technology, USA)
Shady Elbassuoni (AUB, Lebanon)
Sourav S Bhowmick (Nanyang Technological University, Singapore)
Stefanie Scherzinger (OTH Regensburg, Germany)
Sudeepa Roy (Duke University, USA)
Themis Palpanas (Paris Descartes University, France)
Xiang Ni (IBM Research, USA)
Yannis Velegrakis (Utrecht University, Netherlands)
Yongluan Zhou (University of Copenhagen, Denmark)

Best Paper Award Chair:
Alon Halevy (Facebook AI, USA)

Best Paper Award Committee:
Anastasia Ailamaki (EPFL, Switzerland)
Peter Haas (University of Massachusetts, USA)
Christian S. Jensen (Aalborg University, Denmark)