
Proceedings of the Thirty-Seventh Conference on Uncertainty in Artificial Intelligence

Preface

Cassio de Campos¹

Marloes H. Maathuis²

Erik Quaeghebeur¹

¹Uncertainty in AI Group, Dep. of Math. and Computer Science, Eindhoven University of Technology, The Netherlands

²Seminar for Statistics, Department of Mathematics, ETH Zurich, Switzerland

UAI 2021

Introduction The Conference on Uncertainty in Artificial Intelligence (UAI) is one of the premier international conferences on research related to knowledge representation, learning, and reasoning in the presence of uncertainty. UAI is supported by the Association for Uncertainty in Artificial Intelligence (AUAI).

The 37th edition of the conference (UAI 2021) took place from July 27 to 30, 2021. It was held online due to the restrictions imposed by the ongoing Covid pandemic.

Accepted papers and reviewing We received 777 full submissions, of which 83 were desk-rejected or withdrawn, and 205 were ultimately accepted. This volume features all accepted papers.

The program committee consisted of two chairs, 59 senior and 611 regular members (see Tables 1 and 2 below). All submitted papers had at least three reviews, and the large majority had four. The reviewing process was double-blind, but program committee members knew each others' identities. The authors could provide a rebuttal to the reviews and there was a discussion phase. The senior members rated the reviews and incentives were provided to top reviewers.

On-line venues We used three systems to allow for different kinds of online interactions: underline.io provided the main conference website and was used for oral presentations, Gather.town was used for poster presentations, and Mementor was used for mentoring sessions. While there were a few technical glitches, the systems worked quite smoothly in general.

Participants There were 2099 registrations from at least 67 countries. About two-thirds of these were student registrations.

The program The main program took place from July 27 to 29 and consisted of a single-track with six blocks

starting 12 hours apart. Each block was composed of a live keynote talk, oral paper presentations with live discussants, live lightning talks, and a poster session.

We are very glad that we had the following keynote speakers:

- Susan Murphy, *Harvard University, USA*
- Eric Horvitz, *Microsoft, USA*
- Lenka Zdeborová, *EPFL, Switzerland*
- Judea Pearl, *UCLA, USA*
- Ankur Moitra, *MIT, USA*

The program was designed so that every accepted paper had two live components. First, all accepted papers had a poster in Gather.town. Second, each paper was featured by either a 1-minute live lightning talk or by showing an 8-minute pre-recorded video presentation followed by a live discussant and live Q&A with the author. The selection between 8-minute and 1-minute formats was based on both the paper contents and the submitted video presentation.

The conference website contained complete information for each submission, including the full paper and supplementary material, the poster, the 8-minute video and slides, and a Q&A system to interact with the authors.

On July 30, there were three parallel workshops:

- The 8th Causal Inference Workshop
- The 15th Bayesian Modelling Applications Workshop
- The 4th Workshop on Tractable Probabilistic Modeling

Best paper awards The following five papers have received an award:

Best paper:

- “*Measuring data leakage in machine-learning models with Fisher information*” by Awni Hannun, Chuan Guo, and Laurens van der Maaten.

Runner-ups to best paper:

- “*Unbiased gradient estimation for variational auto-encoders using coupled Markov chains*” by Francisco

Ruiz, Michalis Titsias, Taylan Cemgil, and Arnaud Doucet.

- “*Approximate implication with d -separation*” by Batya Kenig.

Best student paper:

- “*Extendability of causal graphical models: algorithms and computational complexity*” by Marcel Wienöbst, Max Bannach, and Maciej Liśkiewicz.

Runner-up to best student paper:

- “*Classification with abstention but without disparities*” by Nicolas Schreuder and Evgenii Chzhen.

ORGANIZING COMMITTEE

The main organizing committee consisted of the following people:

General Chairs

- Jonas Peters, *University of Copenhagen, Denmark*
- David Sontag, *MIT, USA*

Program Chairs

- Cassio de Campos, *Eindhoven University of Technology, The Netherlands*
- Marloes Maathuis, *ETH Zurich, Switzerland*

Workshop Chair

- Silvia Chiappa, *DeepMind, UK*

Publication Chair

- Erik Quaeghebeur, *Eindhoven University of Technology, The Netherlands*

Sponsorship Chair

- Irina Rish, *Université de Montréal and Quebec AI Institute, Canada*

Virtual Chairs

- Christina Heinze-Deml, *ETH Zurich, Switzerland*
- Sebastian Weichwald, *University of Copenhagen, Denmark*

Program Committee Without the volunteers in the program committee, the conference would not have been possible. We are extremely grateful for the efforts of all its members.

The senior members of the program committee are listed in Table 1. The regular members of the program committee are listed in Table 2, where top reviewers’ names are in bold.

ACKNOWLEDGEMENTS

We sincerely thank everyone who contributed to UAI 2021, including the authors of submitted papers, the members of the organizing committee and the program committee, the workshop organizers, the participants, Underline, the AUAI board, and our sponsors.

SPONSORS

Morgan Stanley



FONDS NATIONAL SUISSE
SCHWEIZERISCHER NATIONALFONDS
FONDO NAZIONALE SVIZZERO
SWISS NATIONAL SCIENCE FOUNDATION

Table 1: The Senior Members of the Program Committee

Ashish Sabharwal	<i>Allen Institute for AI</i>
Bo Liu	<i>Auburn University</i>
Aaditya Ramdas, Kun Zhang	<i>Carnegie Mellon University</i>
Sebastien Destercke	<i>CNRS</i>
Elias Bareinboim	<i>Columbia University</i>
Alexander Shekhovtsov	<i>Czech Technical University in Prague</i>
Linda van der Gaag	<i>Dalle Molle Institute for AI</i>
Marco Zaffalon	<i>Dalle Molle Institute for AI Artificialy</i>
Nevena Lazic, Silvia Chiappa, Theophane Weber, Tim Genewein	<i>DeepMind</i>
Sach Mukherjee	<i>DZNE University of Cambridge</i>
Mykola Pechenizkiy, Robert Peharz	<i>Eindhoven University of Technology</i>
Christina Heinze-Deml, Fanny Yang, Niao He	<i>ETH Zurich</i>
Zoltan Szabo	<i>École Polytechnique</i>
Mats J. Stensrud	<i>École Polytechnique Fédérale de Lausanne</i>
Kathryn Laskey	<i>George Mason University</i>
Jakob Runge	<i>German Aerospace Center Technische Universität Berlin</i>
Branislav Kveton	<i>Google Research</i>
Aurelie Lozano	<i>IBM Research</i>
Jin Tian	<i>Iowa State University</i>
Vanessa Didelez	<i>Leibniz Institute Bremen</i>
Vasilis Syrgkanis	<i>Microsoft Research</i>
Rajesh Ranganath	<i>New York University</i>
Fabio Ramos	<i>NVIDIA The University of Sydney</i>
Johannes Textor, Tom Claassen, Tom Heskes	<i>Radboud University</i>
Qiang Ji	<i>Rensselaer Polytechnic Institute</i>
Shohei Shimizu	<i>Shiga University RIKEN</i>
Mathias Drton	<i>Technical University of Munich</i>
Uri Shalit	<i>Technion</i>
Amir Globerson	<i>Tel Aviv University Google</i>
Vibhav Gogate	<i>The University of Texas at Dallas</i>
Alessio Benavoli	<i>Trinity College Dublin</i>
Kristian Kersting	<i>TU Darmstadt</i>
Anna Helena Reali Costa, Fabio Cozman	<i>Universidade de São Paulo</i>
Piotr Zwiernik	<i>Universitat Pompeu Fabra</i>
Ricardo Silva	<i>University College London</i>
Eric Nalisnick	<i>University of Amsterdam</i>
James Cussens	<i>University of Bristol</i>
David Poole	<i>University of British Columbia</i>
Alexander Ihler	<i>University of California, Irvine</i>
Niels Richard Hansen	<i>University of Copenhagen</i>
Aapo Hyvarinen, Mikko Koivisto	<i>University of Helsinki</i>
Benjamin Marlin	<i>University of Massachusetts Amherst</i>
Robin Evans	<i>University of Oxford</i>
Marco Valtorta	<i>University of South Carolina</i>
Linbo Wang	<i>University of Toronto</i>
Alex Luedtke, Emilija Perkovic, Thomas S. Richardson	<i>University of Washington</i>

Table 2: The Members of the Program Committee (top reviewers **in bold**)

Tanvi Verma	<i>A*STAR, Institute of High Performance Computing</i>
Thomas Dyhre Nielsen	<i>Aalborg University</i>
Akash Kumar Dhaka, Arno Solin, Jussi Rintanen, Martin Trapp, Zheng Zhao	<i>Aalto University</i>
Jirka Vomlel, Milan Studeny, Václav Kratochvíl	<i>Academy of Sciences of the Czech Republic</i>
David Arbour, Jennifer Healey	<i>Adobe Research</i>
Piotr Faliszewski	<i>AGH Krakow</i>
Xiao He	<i>Alibaba Group</i>
Rafael Rumi	<i>Almeria University</i>
Kevin Small, Tomas Singliar, Weiwei Cheng	<i>Amazon</i>
Christian Bock	<i>Amazon research ETH Zurich</i>
Teng Li	<i>Anhui University</i>
Tianbing Xu	<i>Apple</i>
Lu Cheng, Ruocheng Guo	<i>Arizona State University</i>
Simon Dirmeier	<i>Artificialy</i>
Frédéric Pichon	<i>Artois University</i>
Dino Oglic	<i>AstraZeneca</i>
Daoming Lyu, Zheng Zhang	<i>Auburn University</i>
Onn Shehory	<i>Bar Ilan University</i>
Nimar S. Arora	<i>Bayesian Logic</i>
Si Liu	<i>Beihang University</i>
Jitao Sang	<i>Beijing Jiaotong University</i>
Armen Aghasaryan	<i>Bell Labs</i>
Eyal S. Shimony	<i>Ben-Gurion University of the Negev</i>
Roland Ramsahai	<i>Berkshire Hathaway Re</i>
Elena Sherman	<i>Boise State University</i>
Jakub Truszkowski	<i>Borealis AI</i>
Barbara Rakitsch, Dan Zhang, Edgar Schoenfeld	<i>Bosch Center for Artificial Intelligence</i>
Judith Lok, Mingrui Liu	<i>Boston University</i>
Charalampos Tsourakakis	<i>Boston University ISI Foundation</i>
Sam Power	<i>Bristol University</i>
Frederick Eberhardt, Siddharth Jain	<i>Caltech</i>
Steven Schockaert	<i>Cardiff University</i>
Biwei Huang, Joseph Ramsey, Kartik Goyal, Petar Stojanov, William Herlands	<i>Carnegie Mellon University</i>
Salem Benferhat	<i>Centre de Recherche en Informatique de Lens</i>
Reinaldo Bianchi	<i>Centro Universitário FEI</i>
Fredrik D. Johansson	<i>Chalmers University of Technology</i>
Roman Barták	<i>Charles University</i>
Liangxiao Jiang	<i>China University of Geoscience</i>
Jilles Vreeken	<i>CISPA Helmholtz Center for Information Security</i>
Jerome Lang, Serena Villata	<i>CNRS</i>
Hua Wang	<i>Colorado School of Mines</i>
Aaron Schein, Anqi Wu, Caleb Miles, Daniel Malinsky, Junzhe Zhang, Mingzhang Yin, Sanghack Lee	<i>Columbia University</i>

Table 2: The Members of the Program Committee (top reviewers **in bold**) – continued

	David Bindel	<i>Cornell University</i>
	Analia Amandi	<i>CONICET \ Universidad Nacional del Centro de la Provincia de Buenos Aires</i>
	Elvis Dohmatob	<i>Criteo</i>
	Ke Sun	<i>CSIRO's Data61</i>
	Ondrej Kuzelka	<i>Czech Technical University in Prague</i>
	Alessandro Antonucci, Alessandro Giusti, Dario Azzimonti, Giorgio Corani, Marco Scutari, Rafael Cabañas	<i>Dalle Molle Institute for AI</i>
	Eugene Santos Jr.	<i>Dartmouth College</i>
	Botao Hao, Fabio Viola, George Papamakarios , Jordi Grau-Moya, Jorg Bornschein , Tom McGrath , Yoram Bachrach	<i>DeepMind</i>
	Alexander Mey, Stephan Bongers	<i>Delft University of Technology</i>
	Jonathan Kuck	<i>Dexterity AI</i>
	Kian Ming Adam Chai	<i>DSO National Labs Singapore</i>
	Jason Poulos, Yuansi Chen	<i>Duke University</i>
	Matthias Troffaes	<i>Durham University</i>
	Ido Guy	<i>eBay</i>
	Alvaro H. C. Correia , David Montalvan, Hilde JP Weerts, Maryam Tavakol , Sibylle Hess, Thomas Krak, Vlado Menkovski, Vu-Linh Nguyen, Wouter Duivesteijn, Xin Du	<i>Eindhoven University of Technology</i>
	Etienne Boursier , Valentin De Bortoli	<i>ENS Paris-Saclay</i>
	Armeen Taeb, Aurelien Lucchi, Bastian A. Rieck, Carl-Johann Simon-Gabriel , Jack Kuipers, Jinzhou Li, Leslie O'Bray, Markus Kalisch, Matthias Löffler, Meta-Lina Spohn, Mona Azadkia	<i>ETH Zurich</i>
	Jalal Etesami	<i>École Polytechnique Fédérale de Lausanne</i>
	David Eriksson, Maria Lomeli, Siqi Nie, Theofanis Karaletsos, Vashist Avadhanula	<i>Facebook</i>
	Aditya Grover, Mustafa Mukadam, Ramakrishna Vedantam	<i>Facebook AI Research</i>
	Heloisa Arruda Camargo	<i>Federal University of São Carlos</i>
	Oswald Lanz, Paolo Traverso	<i>Fondazione Bruno Kessler (FBK)</i>
	Praveen Narayanan	<i>Ford Motory Company</i>
	Nico Piatkowski	<i>Fraunhofer IAIS</i>
	Takuya Takagi	<i>Fujitsu Laboratories Ltd.</i>
	Ashwin Pananjady	<i>Georgia Institute of Technology</i>
	Andreas Gerhardus , Christoph Kaeding	<i>German Aerospace Center (DLR)</i>
	Britta Velten	<i>German Cancer Research Center</i>
	Oliver Dukes	<i>Ghent University</i>
	Ezequiel Smucler	<i>Glovo</i>
	Visvanathan Ramesh	<i>Goethe University Frankfurt</i>
	Alex Alemi , Christoph Dann, David Belanger, Julian Zimmert, Martin Mladenov, Samira Abnar	<i>Google</i>
	Effrosyni Kokiopoulou	<i>Google AI</i>
	Chen Liang, Hanjun Dai, Kumar Avinava Dubey, Wittawat Jitkrittum	<i>Google Research</i>
	Franz Pernkopf, Franz Wotawa	<i>Graz University of Technology</i>
	Ruichu Cai	<i>Guangdong University of Technology</i>
	Xiaofeng Zhang	<i>Harbin Institute of Technology (Shenzhen)</i>
	Aaron Sarvet , Jessica G. Young, Lan Wen, Nada Amin	<i>Harvard University</i>
	Yoav Wald	<i>Hebrew University</i>

Table 2: The Members of the Program Committee (top reviewers **in bold**) – continued

	Niki Kilbertus	<i>Helmholtz AI</i>
	Jiji Zhang, Jun Fan, William Cheung	<i>Hong Kong Baptist University</i>
	Bo Han	<i>Hong Kong Baptist University RIKEN</i>
	Zhiliang Tian	<i>Hong Kong University of Science and Technology</i>
	Anders L. Madsen	<i>HUGIN EXPERT Aalborg University</i>
	Debarun Bhattacharjya , Kanthi K. Sarpatwar, Lam M. Nguyen, Michal Ozery-Flato, Parikshit Ram, Rachel Bellamy, Radu Marinescu, Tian Gao, Tin K. Ho	<i>IBM Research</i>
	Giuseppe Manco	<i>ICAR-CNR</i>
	Zhao Wang	<i>Illinois Institute of Technology</i>
	Alessandra Russo, Dimitrios Myrisiotis, George Wynne	<i>Imperial College London</i>
	Sebastian M. Schmon	<i>Improbable</i>
	Mohamed Daoudi	<i>IMT Lille Douai</i>
	Ambedkar Dukkipati	<i>Indian Institute of Science</i>
	Asif Ekbal	<i>Indian Institute of Technology, Patna</i>
	Mudassir Shabbir	<i>Information Technology University</i>
	Helene Fargier	<i>Institut de Recherche en Informatique de Toulouse</i>
	Joao Marques-Silva	<i>Institut de Recherche en Informatique de Toulouse CNRS</i>
	Roman Klinger	<i>Institut für Maschinelle Sprachverarbeitung</i>
	Xiaoming Sun	<i>Institute of Computing Technology, Chinese Academy of Sciences</i>
	Sujit P. Gujar	<i>International Institute of Information Technology, Hyderabad</i>
	L. Enrique Sucar	<i>INAOE</i>
	Francisco Santos	<i>INESC-ID University of Lisbon</i>
	Joon Kwon, Régis Sabbadin, Simon de Givry	<i>INRAE</i>
	Jan Ramon	<i>INRIA</i>
	Benjamin Guedj, Valentina Zantedeschi	<i>INRIA University College London</i>
	Nahla Ben Amor, Zied Elouedi	<i>ISG Tunis</i>
	Daniela Godoy	<i>ISISTAN (CONICET/UNCPBA)</i>
	Leonardo Cella	<i>Italian Institute of Technology</i>
	Therese Graversen	<i>IT University of Copenhagen</i>
	Ilya Shpitser , Noam Finkelstein, Razieh Nabi, Roy Adams, Zach Wood-Doughty	<i>Johns Hopkins University</i>
	Robert E. Tillman, Vamsi K. Potluru	<i>JP Morgan AI Research</i>
	Xin Gao	<i>King Abdullah University of Science and Technology</i>
	Marina Riabiz	<i>King's College London</i>
	Donghwan Lee, Eunho Yang, Il-Chul Moon, Jaesik Choi, Jinwoo Shin, Sejun Park	<i>Korea Advanced Institute of Science and Technology</i>
	Liam Solus	<i>KTH Royal Institute of Technology</i>
	Pedro Zuidberg Dos Martires, Samuel M. Kolb, Vincent Derkinderen	<i>KU Leuven</i>
	Danil Kuzin, Plamen Angelov	<i>Lancaster University</i>
	Janine Witte	<i>Leibniz Institute Bremen</i>
	Ulf Brefeld	<i>Leuphana University of Lüneburg</i>

Table 2: The Members of the Program Committee (top reviewers **in bold**) – continued

Jose Peña	<i>Linköping University</i>
David Ruegamer , Florian Pfisterer	<i>LMU Munich</i>
Dmitrii Podoprikin	<i>Lomonosov MSU</i>
Søren W. Mogensen	<i>Lund University</i>
Thanapon Noraset	<i>Mahidol University</i>
Riddhiman Adib	<i>Marquette University</i>
Andrei Barbu, Chandler Squires , Ge Liu, Hao He, Hsin-Yu Lai, Hunter Lang , Irene Chen, Marco Cusumano-Towner, Michael Oberst , Paxton M. Turner , Ross E. Allen, Yuzhe Yang, Zeshan M. Hussain	<i>Massachusetts Institute of Technology</i>
Kia Khezeli	<i>Mayo Clinic</i>
Prakash Panangaden	<i>McGill University</i>
Aniket Anand Deshmukh, Ching-An Cheng, Jinchao Li	<i>Microsoft</i>
Emre Kiciman, Monojit Choudhury	<i>Microsoft Research</i>
Vincent Mai	<i>Mila \ Université de Montréal</i>
Julian Gutierrez	<i>Monash University</i>
Pratik Gajane	<i>Montanuniversitaet Leoben</i>
Michel Besserve	<i>MPI for Intelligent Systems, Tübingen</i>
Ming Li, Peng Zhao, Tian Xu	<i>Nanjing University</i>
Bo An, Jie Zhang, Yiping Ke	<i>Nanyang Technological University</i>
Umberto Straccia	<i>National Research Council, Italy</i>
Hsuan-Tien Lin	<i>National Taiwan University</i>
Yiping Song	<i>National University of Defense Technology</i>
Bryan Kian Hsiang Low	<i>National University of Singapore</i>
Aahlad Puli, Chinmay Hegde, Karthik C. S., Mukund Sudarshan, Pavel Izmailov, Xintian Han	<i>New York University</i>
Dennis Prangle	<i>Newcastle University</i>
Lu Feng	<i>NEC China</i>
Brandon Malone, Mathias Niepert	<i>NEC Laboratories Europe</i>
Heiko Zimmermann, Yun Fu	<i>Northeastern University</i>
Ziyu Guan	<i>Northwest University</i>
Feiping Nie	<i>Northwestern Polytechnical University</i>
Helge Langseth, Odd Erik Gundersen	<i>Norwegian University of Science and Technology</i>
Xianchao Wu	<i>NVIDIA Japan</i>
Shalini De Mello, Wonmin Byeon	<i>NVIDIA Research</i>
Arjen Hommersom	<i>Open University</i>
Loizos Michael	<i>Open University of Cyprus</i>
Kagan Tumer	<i>Oregon State University</i>
Mehul Bhatt	<i>Örebro University, CoDesign Lab</i>
Julian Lienen, Viktor Bengs	<i>Paderborn University</i>
Jiadong Liang, Yangbo He, Zhihua Zhang	<i>Peking University</i>
Haiqin Yang	<i>Ping An Life \ The Chinese University of Hong Kong</i>
Giuseppe Canonaco	<i>Politecnico di Milano</i>
Vasiliki Velona	<i>Pompeu Fabra University</i>
Amir R. Asadi, Gregory Gundersen, Zoe Ashwood	<i>Princeton University</i>
Changlin Wan, Kamyar Azizzadenesheli, Mohammad Ali Javidian, Murat Kocaoglu , Vaneet Aggarwal, Xueyan Niu, Yexiang Xue	<i>Purdue University</i>

Table 2: The Members of the Program Committee (top reviewers **in bold**) – continued

Preslav Nakov	<i>Qatar Computing Research Institute, Hamad Bin Khalifa University</i>
Anthony Constantinou	<i>Queen Mary University of London</i>
Franka Buytenhuijs, Inge Wortel, Ioan Gabriel Bucur, Johan Kwisthout, Laurens Sluijterman, Max Hinne, Twan van Laarhoven, Yuliya Shapovalova	<i>Radboud University</i>
Shabaz Sultan	<i>Radboudumc</i>
Brian Vegetable	<i>RAND Corporation</i>
Zhiwu Lu	<i>Renmin University of China</i>
Swarat Chaudhuri	<i>Rice University</i>
Mark Bartlett	<i>Robert Gordon University</i>
Piyush Tagade	<i>Rolls-Royce Singapore</i>
David M. Pennock	<i>Rutgers University</i>
Adrian Javaloy	<i>Saarland University</i>
Esra Erdem	<i>Sabanci University</i>
Guido Sanguinetti	<i>Scuola Internazionale Superiore di Studi Avanzati</i>
Fergus Simpson	<i>Secondmind</i>
Gunhee Kim	<i>Seoul National University</i>
Haopeng Chen, Lin Liu, Paul Weng, Shikui Tu, Shuai Li, Xiaolin Huang	<i>Shanghai Jiao Tong University</i>
Wei Lu	<i>Singapore University of Technology and Design</i>
Ivan Oseledets	<i>Skolkovo Institute of Science and Technology</i>
Evgeny Burnaev	<i>Skoltech</i>
Nawal Benabbou	<i>Sorbonne Université, LIP6</i>
Xin Geng	<i>Southeast University</i>
Yu Zhang	<i>Southern University of Science and Technology</i>
Rodrigo de Salvo Braz	<i>SRI International</i>
Anusha Lalitha, Chenlin Meng, Colin Wei, Erik Sverdrup, Jiaming Song, Junzi Zhang, Lihua Lei , Michael V. Celentano , Ransalu Senanayake, Stephen O. Mussmann, Thomas Icard, Xinkun Nie, Yang Song, Yanjun Han	<i>Stanford University</i>
Maria Bampa	<i>Stockholm University</i>
Luca Baldassarre	<i>Swiss Re</i>
Churn-Jung Liao	<i>Taiwan Academy of Science</i>
Mikkel Schmidt	<i>Technical University of Denmark</i>
Alexandros Grosdos Koutsoumpelias, Carlos Amendola, David Strieder, Fabian R. Pieroth , Konstantin Göbller, Philipp Dettling, Reinhard Heckel	<i>Technical University of Munich</i>
Fernando Martínez-Plumed	<i>Technical University of Valencia</i>
Avinash Mohan , Esther Derman, Nir Ailon, Nir Baram	<i>Technion</i>
Anne Sabourin	<i>Telecom Paris</i>
Ferran Diego	<i>Telefonica R&D</i>
Xiaojin Zhang	<i>The Chinese University of Hong Kong</i>
Leonard KM Poon	<i>The Education University of Hong Kong</i>
Dong Gong	<i>The University of Adelaide</i>

Table 2: The Members of the Program Committee (top reviewers **in bold**) – continued

Anthony P. Tompkins, Fengxiang He, Rafael Oliveira	<i>The University of Sydney</i>
Nicholas Ruoizzi, Sriraam Natarajan, Tahrima Rahman	<i>The University of Texas at Dallas</i>
Han Bao	<i>The University of Tokyo RIKEN</i>
Deyi Xiong	<i>Tianjin University</i>
Tingting Zhao	<i>Tianjin University of Science and Technology</i>
Takayuki Okatani	<i>Tohoku University RIKEN AIP</i>
Daniel Berrar	<i>Tokyo Institute of Technology</i>
Sébastien Bratières	<i>Translated</i>
Longbo Huang, Yanan Sui	<i>Tsinghua University</i>
Alejandro Molina, Devendra Singh Dhami, Patrick Schramowski	<i>TU Darmstadt</i>
Gabriele Kern-Isberner, Michael Kirchhof	<i>TU Dortmund University</i>
Sebastian Rudolph	<i>TU Dresden</i>
Johannes Peter Wallner, Stefan Szeider	<i>TU Wien</i>
Bozhena Bidyuk	<i>Uber</i>
Antonio Salmeron	<i>Universidad de Almeria</i>
Felipe Tobar	<i>Universidad de Chile</i>
Manuel Gomez-Olmedo	<i>Universidad de Granada</i>
Gerardo I. Simari	<i>Universidad Nacional del Sur in Bahia Blanca CONICET</i>
Denis D. Maua, Marcelo Finger	<i>Universidade de São Paulo</i>
Fabrizio Riguzzi	<i>Universita di Ferrara</i>
Gherardo Varando	<i>Universitat de València</i>
Vicent Botti	<i>Universitat Politècnica de València</i>
Robert Castelo	<i>Universitat Pompeu Fabra</i>
Luigi Portinale	<i>Università del Piemonte Orientale</i>
Roberto Esposito	<i>Università di Torino</i>
Benito van der Zander, Maciej Liskiewicz, Marcel Wienöbst	<i>Universität zu Lübeck</i>
Engelbert Mephu Nguifo	<i>Université Clermont Auvergne CNRS LIMOS</i>
Elena Cabrio	<i>Université Côte d'Azur CNRS INRIA I3S</i>
Nicolas Gillis	<i>Université de Mons</i>
Paul Honeine	<i>Université de Rouen Normandie</i>
Benjamin Quost, Thierry Denoeux	<i>Université de technologie de Compiègne</i>
Mohamed Hebiri	<i>Université Gustave Eiffel</i>
Hedi Hadiji	<i>Université Paris Saclay</i>
Barry O'Sullivan	<i>University College Cork</i>
David Watson, Ilyes Khemakhem, Mirco Musolesi	<i>University College London</i>
Peter Dolog	<i>University of Aalborg</i>
Ajin Joseph, Lili Mou	<i>University of Alberta</i>
Philip Versteeg , Sara Magliacane, Tameem Adel	<i>University of Amsterdam</i>
Nicolas Gutowski	<i>University of Angers</i>
Yannis Panagakis	<i>University of Athens</i>
Claudia d'Amato, Nicola Di Mauro	<i>University of Bari</i>
Giusi Moffa	<i>University of Basel</i>
Sandipan Roy	<i>University of Bath</i>
Andrea Omicini, Michele Lombardi	<i>University of Bologna</i>
Rafael Poyiadzis	<i>University of Bristol</i>

Table 2: The Members of the Program Committee (top reviewers **in bold**) – continued

Huang Fang	<i>University of British Columbia</i>
Maria Vanina Martinez	<i>University of Buenos Aires</i>
Abdel-Ilhah Mouaddib	<i>University of Caen Normandy</i>
Ajay Tanwani, Cheng Ju, Erin Grant, Liam Hodgkinson, Stephen Bates, Thomas Gilbert, Yixin Wang	<i>University of California, Berkeley</i>
Kalev Kask, Rina Dechter	<i>University of California, Irvine</i>
Ahmed Alaa, Antonio Vergari , Arthur Choi, Huan Zhang , Jiafan He, Lin Yang, Mojtaba Sahraee-Ardakan , Nur Kaynar, Pan Xu, Pasha Khosravi , Quanquan Gu, Steven J. Holtzen, Yitao Liang, YooJung Choi, Zhe Zeng	<i>University of California, Los Angeles</i>
Christian Shelton	<i>University of California, Riverside</i>
Libin Zhu, Yi Hao, Zhiao Huang	<i>University of California, San Diego</i>
Guo Yu	<i>University of California, Santa Barbara</i>
Jose Miguel Hernandez-Lobato, Marcin B. Tomczak, Mateja Jamnik, Robert Pinsler , Shuai Li, Umang Bhatt	<i>University of Cambridge</i>
Sven Wang	<i>University of Cambridge Massachusetts Institute of Technology</i>
Thomas Meyer	<i>University of Cape Town CAIR</i>
Julia Flores	<i>University of Castilla - La Mancha</i>
Gita Sukthankar	<i>University of Central Florida</i>
Byol Kim , Y. Samuel Wang	<i>University of Chicago</i>
Anders Søgaard, Helene Rytgaard, Lasse Petersen, Leonard Henckel , Niklas Pfister, Nikolaj Thams , Phillip B Mogensen, Sebastian Weichwald , Sorawit Saengkyongam	<i>University of Copenhagen</i>
Paulius Dilkas	<i>University of Edinburgh</i>
Alin Dobra	<i>University of Florida</i>
Nicola Gnecco, Sebastian Engelke, Stephane Marchand-Maillet	<i>University of Geneva</i>
Beatriz López	<i>University of Girona</i>
Hoang D. Nguyen	<i>University of Glasgow</i>
Serafín Moral	<i>University of Granada</i>
Antti Koskela, Arto Klami, Teemu Roos	<i>University of Helsinki</i>
Yuanhua Huang	<i>University of Hong Kong</i>
Cong Xie, Eyal Amir, Hanghang Tong, Linyi Li, Xinran Li, Yingxiang Yang	<i>University of Illinois Urbana-Champaign</i>
Sanvesh Srivastava	<i>University of Iowa</i>
Christopher Nemeth	<i>University of Lancaster</i>
Enrique Naredo	<i>University of Limerick</i>
Xingyu Zhao	<i>University of Liverpool</i>
Bruno C. da Silva , Justin Svegliato, Meet P. Vadera, Raghavendra Addanki, Sainyam Galhotra, Saket Tiwari	<i>University of Massachusetts Amherst</i>
Mingming Gong	<i>University of Melbourne</i>
Deepak Venugopal	<i>University of Memphis</i>
Raed AL Kontar, Xu Shi	<i>University of Michigan</i>
Fabio Stella, Rafael Peñalosa	<i>University of Milano-Bicocca</i>
Zhi-Li Zhang	<i>University of Minnesota, Twin Cities</i>
Christine Sinoquet, Philippe Leray	<i>University of Nantes</i>
Sriram Somanchi	<i>University of Notre Dame</i>
Johan Pensar	<i>University of Oslo</i>

Table 2: The Members of the Program Committee (top reviewers **in bold**) – continued

Enrique Miranda	<i>University of Oviedo</i>
Andrew Jesson, Limor Gultchin , Michael Benedikt, Pascal Notin , Tim G. J. Rudner	<i>University of Oxford</i>
Elena Stanghellini	<i>University of Perugia</i>
Salvatore Ruggieri	<i>University of Pisa</i>
Junxiang Chen, Tianjiao Chu	<i>University of Pittsburgh</i>
Jhonatan Oliveira	<i>University of Regina</i>
T. K. Satish Kumar	<i>University of Southern California</i>
Chang Xu	<i>University of Sydney</i>
Jose A. Lozano	<i>University of the Basque Country</i>
Nhat Ho	<i>University of Texas at Austin</i>
Liu Ziyin	<i>University of Tokyo</i>
Takashi Ishida	<i>University of Tokyo RIKEN</i>
Cindy Zhang, Gerald Penn, Nima Eshraghi, Renjie Liao, Roger B. Grosse, Ying Zhou, Yuexia Zhang, Yuwen Xiong	<i>University of Toronto</i>
Taro Tezuka	<i>University of Tsukuba</i>
Ralf Eggeling	<i>University of Tübingen</i>
Shandian Zhe, Shibo Li	<i>University of Utah</i>
Alberto Castellini	<i>University of Verona</i>
Sebastian Tschatschek	<i>University of Vienna</i>
Ji Gao	<i>University of Virginia</i>
Eibe Frank	<i>University of Waikato</i>
Błażej Miasojedow	<i>University of Warsaw</i>
Jack E. Jewson	<i>University of Warwick</i>
Alexander Greaves-Tunnell, Alex Ratner, Christopher Aicher, Fan Xia, Hongxiang Qiu, Iain Carmichael, Richard F. Guo, Samson Koelle, Sheridan Grant, Tianyi Zhou, Wenyu Chen , Xiudi Li	<i>University of Washington</i>
Kimon Fountoulakis, Peter van Beek, Zhenyu A. Liao	<i>University of Waterloo</i>
Ramya Korlakai Vinayak, Subhojyoti Mukherjee	<i>University of Wisconsin-Madison</i>
Mehdi Dastani, Silja Renooij, Thijs van Ommen	<i>Utrecht University</i>
Jakub M. Tomczak	<i>Vrije Universiteit Amsterdam</i>
Sarra M. Alqahtani	<i>Wake Forest University</i>
Jana Doppa	<i>Washington State University</i>
Yifan Cui	<i>Wharton School of the University of Pennsylvania</i>
Badong Chen	<i>Xi'an Jiaotong University</i>
KunHong Liu, Yunlong Liu	<i>Xiamen University</i>
Cheng Deng	<i>Xidian University</i>
David van Dijk, Zifan Li	<i>Yale University</i>
Sung-Bae Cho	<i>Yonsei University</i>
Liang Duan	<i>Yunnan University</i>