July 15-19, 2018
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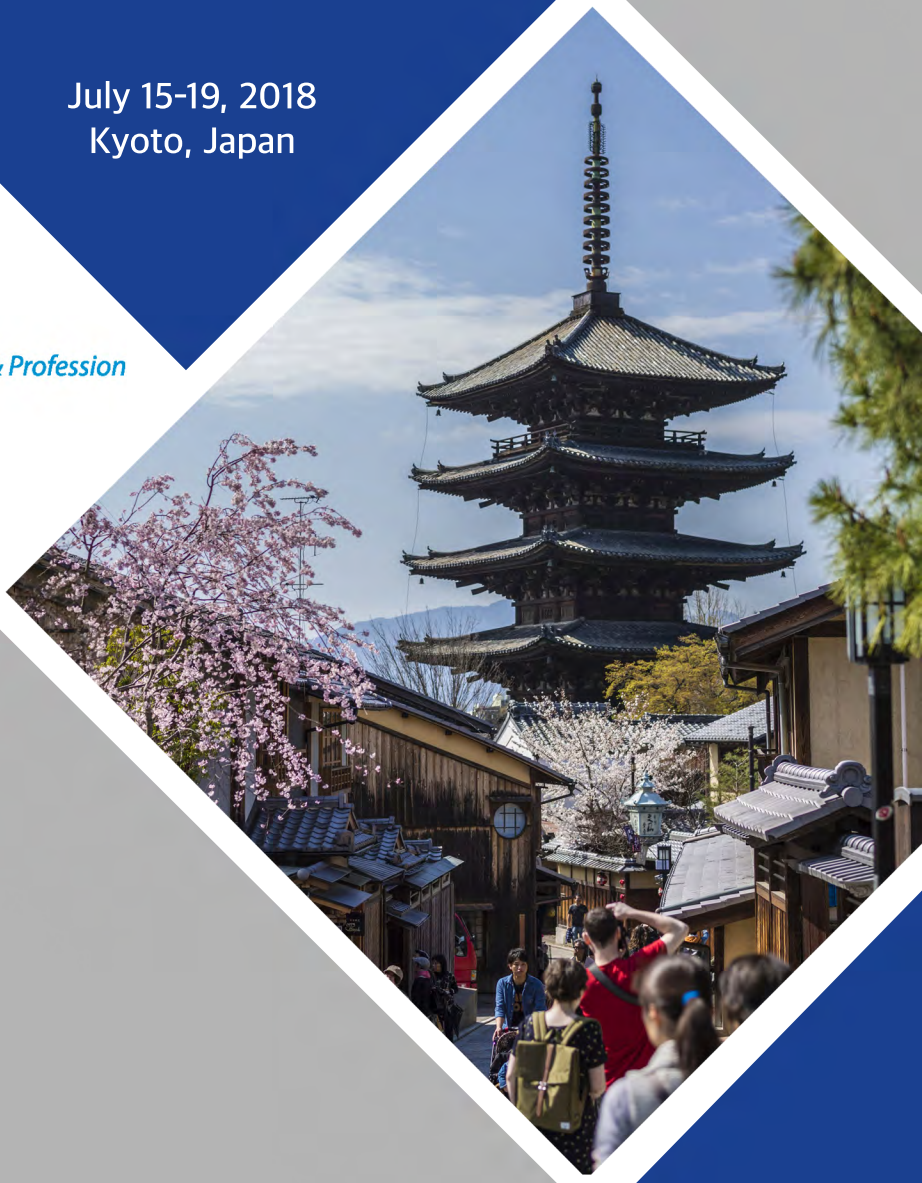

GECCO'18 Companion

Proceedings of the 2018

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General Chair's Welcome

It is my pleasure to welcome you to the Genetic and Evolutionary Computation Conference (GECCO) 2018 in Kyoto, Japan, July 15-19, on behalf of the entire organization committee. It is a great honor to held GECCO in Asia for the first time, parallel to the splendid Gion festival. GECCO is the main conference of the Special Interest Group on Genetic and Evolutionary Computation (SIGEVO) of the Association for Computing Machinery (ACM). GECCO prides itself in being the top quality conference in the area of genetic and evolutionary computation. This quality is ensured by having a selective and thorough reviewing process. Decisions on the acceptance of papers are made by expert track chairs with strong reputations, covering all the key areas in our field.

This year 514 papers were submitted to 13 different tracks, and 1910 reviews were assigned. Less than 38% of papers have been accepted as full papers, with a further 29% accepted for poster presentation. In addition, 65 poster-only papers were submitted, of which less than 48% were accepted for poster presentation.

I am thrilled that this year we are able to offer an enticing variety of industry invited keynote presentations by Kazuo Yano (Hitachi Ltd.), Tatsuya Okabe (DENSO Co., Ltd.), Naoko Yamazaki (former JAXA astronaut), and, for the SIGEVO Chair plenary lecture, David E. Goldberg (ThreeJoy Associates, Inc. and University of Illinois).

Attending GECCO provides an opportunity to listen to and interact with the leading experts in our field, to establish new collaborations, and to reunite with well-known friends. On top of that, GECCO this year offers an amazing plethora of 21 workshops and 40 tutorials at no extra charge. Furthermore, with the competitions and the annual Humies event sponsored by John Koza, GECCO are sure to present the edge of modern computational possibilities and the latest human competitive results in our field. Following last year initiatives, GECCO 2018 continues this year the Summer School and the Job Market events. GECCO 2018 also brings a few items to the table such as the mobile application, an improved voting system for the best paper awards where attendees can only vote for one best paper session, and an integrated review of workshops and competitions within the same submission system.

I would like to thank all authors for submitting their excellent work to GECCO 2018 and all people who contributed to the organization of the conference. I am very much in debt to the organization committee, the track chairs, and the reviewers for their tremendous works. GECCO could not happen without the joint and tireless effort of the amazing people that make up the GECCO community. In particular, I would like to specifically thank the editor-in-chief Hernan Aguirre for the excellent teamwork, the local chair Hisashi Handa and the local financial chair Hiroyuki Sato for the arrangement of local activities, and the proceedings chair Arnaud Liefooghe for the huge job of getting the proceedings together in time. I would also like to thank Enrique Alba, Kalyanmoy Deb, and Darrell Whitley from the business commit-tee of GECCO, and Franz Rothlauf and Marc Schoenauer from SIGEVO for their in-depth knowledge, experience and advice on how to organize a successful GECCO. In addition, I would like to thank the core event organization team, Roxane Rose, Cara Candler, and Annabel Custer from Executive Events for handling registrations and logistics, and Mark Montague and Leah Glick from Linklings for improving the paper submission system to handle all types of papers including workshop papers, poster papers, and competitions.

On behalf of GECCO, I further want to thank our industry sponsors SparkCognition, Nature Research, Sentient, Uber AI Labs, Springer, Beacon and ACM SIGEVO as well as Japanese sponsors NEC, Fujitsu Limited, Rakuten/Linkshare, NTT DATA Engineering Systems Corporation, DataDirect Networks Japan, HPCTECH Corporation, Intelligent Light, The Japanese Society for Evolutionary Computation, Shinshu University, The University of Electro-Communications (UEC), Artificial Intelligence eXploration (AIX) research center at UEC for their contribution and supports.

Finally, I sincerely wish all of you attending GECCO an excellent conference experience that brings you a lot of new insights, collaborations, ideas and inspiration for future research, and of course, some fun to go with it all.

Keiki Takadama
GECCO 2018 General Chair
The University of Electro-Communications
Tokyo, Japan

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Suguru Ueda, *Saga University*
Markus Ullrich, *University of Applied Sciences Zittau/Görlitz*
Ryan Urbanowicz, *University of Pennsylvania*
Pablo Valledor, *ArcelorMittal*
Danilo Vasconcellos Vargas, *Kyushu University*
Nadarajen Veerapen, *University of Stirling*
Marley Vellasco, *Department fo Electrical Engineering, Pontifical Catholic University of Rio de Janeiro*
Sebastien Verel, *Université du Littoral Côte d'Opale*
Antonio Villalón, *S2 Grupo*
Marco Villani, *University of Modena and Reggio Emilia, Italy*
Aljosa Vodopija, *Jozef Stefan Institute, Jozef Stefan International Postgraduate School*
Vanessa Volz, *TU Dortmund University*
Vida Vukasinovic, *JSI*
Markus Wagner, *School of Computer Science, The University of Adelaide*
Stefan Wagner, *University of Applied Sciences Upper Austria, Johannes Kepler University*
David Walker, *University of Exeter*
Handing Wang, *University of Surrey*
John Warwicker, *University of Sheffield*
Jaroslaw Was, *AGH University of Science and Technology*
Thomas Weise, *University of Science and Technology of China (USTC), School of Computer Science and Technology*
Bernhard Werth, *University of Applied Sciences Upper Austria, Johannes Keppler University Linz*
David White, *University of Sheffield*
Stewart W. Wilson, *Prediction Dynamics*
Stephan Winkler, *University Of Applied Sciences Upper Austria*
Carsten Witt, *Technical University Of Denmark*
Banzhaf Wolfgang, *Michigan State University*
John Woodward, *Queen Mary, University of London*
Zijun Wu, *Hefei University*
Yang Xin-Shi, *Middlesex University London*
Jifeng Xuan, *Wuhan University*
Anil Yaman, *Eindhoven University of Technology*
Shengxiang Yang, *De Montfort Unviersity - Key Laboratory of Intelligent Computing and Information Processing, Ministry of Education, Xiangtan University*
Donya Yazdani, *University of Sheffield*
Shin Yoo, *Korea Advanced Institute of Science and Technology*
Tian-Li Yu, *Department of Electrical Engineering, National Taiwan University*
Yang Yu, *Nanjing University*
Martin Zaefferer, *TH Köln*
Ales Zamuda, *University of Maribor*
Saúl Zapotecas Martínez, *CINVESTAV-IPN*
Christine Zarges, *Department of Computer Science, Aberystwyth University*
Jan Zenisek, *University of Applied Sciences Upper Austria*
Mengjie Zhang, *Victoria University of Wellington*
Qingfu Zhang, *City University of Hong Kong, City University of Hong Kong Shenzhen Research Institute*
Xingyi Zhang, *Anhui Unversity*
Ibrahim Zincir, *Yasar University*