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GECCO'19 Companion

Proceedings of the 2019

**Genetic and Evolutionary Computation
Conference Companion**

Sponsored by:

ACM SIGEVO

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Dear GECCO attendees,

Welcome to the Genetic and Evolutionary Computation Conference (GECCO). After the tremendously successful GECCO 2018 in Kyoto, Japan, GECCO returns this year to Europe, at the heart of one of its most beautiful capitals, Prague.

GECCO is the largest selective conference in the field of Evolutionary Computation, and the main conference of the Special Interest Group on Genetic and Evolutionary Computation (SIGEVO) of the Association for Computing Machinery (ACM). GECCO implements a rigorous and selective reviewing process to identify important and technically sound papers to publish. The technical program is divided into thirteen tracks reflecting all aspects of our field and chaired by experts who make the decisions on accepted papers.

This year, we received 501 papers and accepted 173 of them, which results in a 35% acceptance rate. Those papers are presented by authors orally during the conference. We additionally accepted 168 posters that will be presented during the poster session on Monday evening.

Besides the technical tracks, GECCO includes 33 tutorials selected among 63 proposals and 25 workshops reflecting important topics in our field. They take place during the first two days together with competitions.

The Evolutionary Computation community can be proud that their research is strongly connected to practical problems. At GECCO, research or discussions on applications is present, in particular through the Real World Applications track, the Humies, and the Evolutionary Computation in Practice session.

We are thrilled to welcome as keynote speakers Raia Hadsell from Google Deep Mind and Robert Babuska from TU Delft. We feel greatly honored that Ingo Rechenberg, one of the pioneers of the field of Evolutionary Computation, accepted to give the SIGEVO keynote this year.

We would like to thank all authors for submitting their work to GECCO 2019 as well as tutorial speakers and workshop organizers.

The organization of a conference like GECCO is a tremendous task relying on many people. We are humble and very thankful for their work. We would like to mention first the different chairs: track, tutorial, workshop, student affairs, publicity, competition, late breaking abstracts, student workshop, hot off the press chairs, and the program committee

We would like to specifically mention and thank deeply Manuel López-Ibáñez, Editor-in-Chief, and Petr Pošík, local chair, for their dedicated work and kindness. Personal thanks go also to Leslie Pérez Cáceres, proceedings chair, who did not hesitate to spend several nights working on the proceedings, program and schedule. We would also like to mention Roxane Rose and Brenda Ramirez, from Executive Events, who handled logistics and registrations, and Franz Rothlauf, Marc Schoenauer, Enrique Alba and Darrell Whitley from SIGEVO for their advice and guidance to organize GECCO.

On behalf of GECCO, we would also like to thank our sponsors and supporters, whose support allowed us to fund additional student travel grants.

Enjoy the conference!

Anne Auger
GECCO 2019 General Chair
Inria and Ecole Polytechnique,
France

Thomas Stützle
GECCO 2019 General Chair
IRIDIA, Université libre de
Bruxelles Belgium

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<i>Hugo Monzón and Hernán Aguirre (Shinshu University); Sébastien Verel (Univ. Littoral Côte d'Opale); Arnaud Liefooghe and Bilel Derbel (Univ. Lille, Inria Lille - Nord Europe); and Kiyoshi Tanaka (Shinshu University)</i>	

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<i>Quentin Renau and Johann Dreö (Thales Research & Technology); Carola Doerr (CNRS, Sorbonne Université); and Benjamin Doerr (Ecole Polytechnique)</i>	

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<i>Guillem Rodríguez Corominas (Universitat Politècnica de Catalunya - BarcelonaTech), Christian Blum (Artificial Intelligence Research Institute (IIIA-CSIC)), and Maria J. Blesa (Universitat Politècnica de Catalunya - BarcelonaTech)</i>	

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<i>Henrik Smedberg (University of Skövde)</i>	
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<i>Renan José dos Santos Viana (Programa de Pós-Graduação em Modelagem Matemática e Computacional - Centro Federal de Educação Tecnológica de Minas Gerais); André Gustavo dos Santos (Universidade Federal de Viçosa); Flávio Vinícius Cruzeiro Martins (Centro Federal de Educação Tecnológica de Minas Gerais); and Elizabeth Fialho Wanner (Aston University, Centro Federal de Educação Tecnológica de Minas Gerais)</i>	
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<i>Dmitry Vinokurov, Maxim Buzdalov, and Arina Buzdalova (ITMO University); Benjamin Doerr (Ecole Polytechnique); and Carola Doerr (CNRS, Sorbonne University)</i>	
Ensemble-Based Constraint Handling in Multiobjective Optimization	2072
<i>Aljosa Vodopija (Jozef Stefan Institute, Jozef Stefan International Postgraduate School); Akira Oyama (Japan Aerospace Exploration Agency); and Bogdan Filipic (Jozef Stefan Institute, Jozef Stefan International Postgraduate School)</i>	