

# Workshops Preface

The field of Genetic and Evolutionary Computation (GEC) continues its growth not only in the depth of its technology but also in its breath to reach out new grounds. The Workshops series held as a part of the Genetic and Evolutionary Computation Conference (GECCO) provides a forum for researchers and practitioners to present and discuss emerging technologies that are related to GEC. The works presented are mostly progressive position papers & promising work in progress. They represent innovation and the future of the field.

This year, we have an exciting and diverse set of workshops. There are sixteen workshops spread over two days, with invited speakers, technical paper presentations and panel discussions. These workshops and their organizers are listed as follows.

**Particle Swarms: The Second Decade** — Riccardo Poli, Jim Kennedy, Tim Blackwell & Alex Freitas

**Open-Source Software for Applied Genetic & Evolutionary Computation (SoftGEC)** — Jason H. Moore

**Optimization by Building & Using Probabilistic Models** — Kumara Sastry, Martin Pelikan

**Graduate Student Workshop** — Anikó Ekárt

**Undergraduate Student Workshop** — Laurence Merkle, Clare Bates Congdon & Frank Moore

**Evolutionary Algorithms for Dynamic Optimization Problems** — Peter A.N. Bosman & Jürgen Branke

**Parallel Bioinspired Algorithms** — Francisco Fernández & Erick Cantú-Paz

**Learning Classifier Systems** — Jaume Bacardit, Ester Bernadó-Mansilla, Martin V. Butz

**Evolutionary Computation & Multi-Agent Systems & Simulation (ECoMASS)** — Bill Rand & Sevan G. Ficici

**Petroleum Applications of Evolutionary Computation** — Alexandre Castellini, Charles Guthrie, David Wilkinson, Burak Yeten & Tina Yu

**Defense Applications of Computational Intelligence** — Frank Moore, Laurence D. Merkle & Stephen C. Upton

**Evolution of Natural & Artificial Systems - Metaphors & Analogies in Single & Multi-Objective Problems** — Ami Moshaiov, Steven Hecht Orzack & Joshua Knowles

**Medical Applications of Genetic & Evolutionary Computation** — Stephen L. Smith & Stefano Cagnoni

**FX-SBSE - Foundations & Cross Cutting Issues in Search Based Software Engineering** — Mark Harman, John Clark, Xin Yao, Joachim Wegener, Christine McCulloch, Tanja Vos

**User-centric Evolutionary Computation** — Iam Parmee

**FD-ET: Future Directions in Evolutionary Testing** — Mark Harman, John Clark, Xin Yao, Joachim Wegener, Christine McCulloch, Tanja Vos

We have included technical papers presented in these Workshops in this Proceeding. We hope you will find the workshops a memorable event with inspiring ideas and fruitful discussions!

**Tina Yu**

*Workshop Chair, GECCO'07 July 7-11, 2007, London, England, United Kingdom*

