

# Call for Papers

2010 Genetic and Evolutionary Computation Conference  
Wednesday – Sunday July 7 – 11, 2010 Portland, Oregon, USA

Largest Conference in the Field of Genetic and Evolutionary Computation

A recombination of the

19th International Conference on Genetic Algorithms (ICGA) and the  
15th Annual Genetic Programming Conference (GP)

[www.sigevo.org/gecco-2010](http://www.sigevo.org/gecco-2010)

## One Conference – Many Mini-Conferences



### Program Tracks

Three days of presentations of the latest high-quality results in at least 15 separate and independent program tracks specializing in various aspects of genetic and evolutionary computation.

### Free Tutorials & Workshops!

Two days of free tutorials and workshops (included with conference registration) presented by some of the world's foremost experts in topics of interest to genetic and evolutionary computation researchers and practitioners.

### Important Dates

- \* **Submission deadline: January 13, 2010**
- \* Notification of paper acceptance: March 10, 2010
- \* Camera-ready submission: April 5, 2010
- \* GECCO-2010 Conference: July 7-11, 2010

### Review Process

Each paper submitted to GECCO will be rigorously reviewed, in a double-blind review process, meaning that reviewers should not be able to infer the identities of the authors of the papers under review, and, of course, that authors will not know the identities of their reviewers.

One of at least 15 separate and independent program committees specializing in various aspects of genetic and evolutionary computation review submitted papers. These committees make their own final decisions on submitted papers for their areas, subject only to conference-wide space limitations and procedures.

Review criteria include significance of the work, technical soundness, novelty, clarity, writing quality, and sufficiency of information to permit replication, if applicable.

### About the Conference Venue

The Portland Marriott Downtown Waterfront Hotel, located in downtown Portland, is near the Portland Riverplace Marina, restaurants, shopping & performing arts venues. Hotel room conference rate \$179 includes complimentary in-room high-speed Internet access.

### How to Submit a Paper

**Meet the Submission Deadline: Wednesday, January 13, 2010.**

### Submit substantially new work

The material in a paper must represent substantially new work that has not been previously published by conferences, journals, or edited books in the genetic and evolutionary computation field.

GECCO allows submissions of material that is substantially similar to a paper being submitted contemporaneously for review in another conference. However, if the submitted paper is accepted by GECCO, the authors agree that substantially the same material will not be published by another conference in the evolutionary computation field. Material may be later revised and submitted to a journal, if permitted by the journal.

### Visit [www.sigevo.org/gecco-2010](http://www.sigevo.org/gecco-2010)

Frank Neumann and

For detailed instructions, including categories, keywords, and formatting requirements visit [www.sigevo.org/gecco-2010](http://www.sigevo.org/gecco-2010).

Be sure to check the web page for changes that may appear as the paper submission deadline approaches.

### Accept author agreement

By submitting a paper, the author(s) agree that, if their paper is accepted, they will:

- \* Submit a final, revised, camera-ready version to the publisher by Monday, April 5, 2010
- \* Register at least one author to attend the conference by Monday, April 19, 2010
- \* Attend the conference (at least one author)
- \* Present the accepted paper at the conference

### More Information

Visit [www.sigevo.org/gecco-2010](http://www.sigevo.org/gecco-2010) for information about deadlines, student travel grants, hotel reservations, student housing, student workshop, the latest list of topics, late-breaking papers, and more.

For matters of science and program content, contact Conference Chair Martin Pelikan at [pelikan@cs.umsl.edu](mailto:pelikan@cs.umsl.edu).

For general help and administrative matters contact GECCO Support at [gecco-admin@tigerscience.com](mailto:gecco-admin@tigerscience.com)



GECCO is sponsored by the Association for Computing Machinery Special Interest Group on Genetic and Evolutionary Computation (SIGEVO). SIG Services: 2 Penn Plaza, Suite 701, New York, NY, 10121, USA, 1-800-342-6626 (USA and Canada) or +212-626-0500

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The Genetic and Evolutionary Computation Conference (GECCO-2010) will present the latest high-quality results in the growing field of genetic and evolutionary computation. Topics include: genetic algorithms, genetic programming, evolution strategies, evolutionary programming, real-world applications, learning classifier systems and other genetics-based machine learning, evolvable hardware, artificial life, adaptive behavior, ant colony optimization, swarm intelligence, biological applications, evolutionary robotics, coevolution, artificial immune systems, and more.

## GECCO Organizers

**Conference Chair:** Martin Pelikan

**Editor-in-Chief:** Jürgen Branke

**Local Chair:** Kumara Sastry

**Publicity Chair:** Pier Luca Lanzi

**Tutorials Chair:** Una-May O'Reilly

**Workshops Chair:** Jaume Bacardit

**Competitions Chairs:** Christian Gagné

**Late Breaking Papers Chair:** Daniel Tauritz

**Graduate Student Workshop Chair:** Riccardo Poli

**Business Committee:** Erik Goodman & Una-May O'Reilly

**Evolutionary Computation in Practice:** Joern Mehnen, Thomas Bartz-Beielstein, David Davis



## Program Tracks and Chairs

**ACO/Swarm Intelligence:** Andries Engelbrecht

**Artificial Life/Robotics/Evolvable Hardware:** Josh Bongart

**Bioinformatics and Computational Biology:** Natalio Krasnagor

**Combinatorial Optimization and Metaheuristics:** Jano van Hemert

**Estimation of Distribution Algorithms:** Kumara Sastry

**Evolutionary Multiobjective Optimization:** Kalyanmoy Deb

**Evolution Strategies and Evolutionary Programming:** Dirk Arnold

**Genetic Algorithms:** Dirk Thierens

**Genetics Based Machine Learning:** Martin V. Butz

**Genetic Programming:** Leonardo Vanneschi

**Generative and Developmental Systems:** Julian Miller

**Parallel Systems:** Enrique Alba

**Real world applications:** Anthony Brabazon

**Search-Based Software Engineering:** Myra Cohen

**Theory:** Carsten Witt

## SIGEVO Officers

\* Darrell Whitley, Chair

\* John R. Koza, Vice Chair

\* Una-May O'Reilly, Secretary

\* Wolfgang Banzhaf, Treasurer

## Planned Free Tutorials

### Introductory Tutorials

\* Genetic algorithms

\* Genetic programming

\* Evolution strategies: Basic introduction

\* Evolutionary computation: A unified view

\* Probabilistic model-building

genetic algorithms

\* Learning Classifier Systems

\* Ant colony optimization

\* Grammatical evolution

\* Statistical analysis for evolutionary

computation: Introduction

\* Evolutionary neural networks

### Advanced Tutorials

\* Genetic Programming Theory

\* Bioinformatics

\* Representations for evolutionary algorithms

\* Evolutionary Multiobjective Optimization

\* Constraint handling techniques using EAs

\* Experimental Research in EC

\* Genetic Algorithms Theory

\* Statistical analysis for evolutionary  
computation: Advanced Techniques

\* Computational Complexity and EC

Erik Goodman

John R. Koza

Thomas Bäck

Kenneth De Jong

Martin Pelikan

Martin V. Butz

Christian Blum

Conor Ryan

Mark Wineberg

Risto Mikkulainen

Riccardo Poli

Jason Moore

Franz Rothlauf

E. Zitzler

Carlos Coello Coello

Mike Preuss

T. Bartz-Beielstein

TBA

TBA

F. Neumann & T. Jansen

## To Propose a Tutorial or Workshop

To propose a tutorial, contact Una-May O'Reilly at [unamay@csail.mit.edu](mailto:unamay@csail.mit.edu)

To propose a workshop, contact Jaume Bacardit at [jqb@cs.nott.ac.uk](mailto:jqb@cs.nott.ac.uk)

Please include "GECCO" in your subject line.

For general help and administrative matters contact GECCO Support at [gecco-admin@tigerscience.com](mailto:gecco-admin@tigerscience.com).

## SIGEVO Executive Committee

Darrell Whitley (chair)

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