*** Call for Papers ***

2012 Genetic and Evolutionary Computation Conference July 07-11, 2012, Philadelphia, USA

Largest Conference in the Field of Genetic and Evolutionary Computation A recombination of the

21st International Conference on Genetic Algorithms (ICGA) and the 17th Annual Genetic Programming Conference (GP)

www.sigevo.org/gecco-2012

GECCO

One Conference – Many Mini-Conferences



Program Tracks

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

Free Tutorials and 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, 2012
- * Notification of paper acceptance: March 13, 2012
- * Camera-ready submission: April 09, 2012
- * Workshop and tutorial proposals submission: November 07, 2011
- * Notification of workshop and tutorial acceptance: November 28, 2011
- * GECCO-2012 Conference: July 07 11, 2012

Review Process

Each paper submitted to GECCO will be rigorously reviewed, in a doubleblind 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.

Each submitted paper will be evaluated by one of at least 15 separate and independent program committees specializing in various aspects of genetic and evolutionary computation. 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.

How to Submit a Paper

Meet the submission deadline (January 13, 2012) and submit substantially new work. 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 However, if the submitted paper is accepted by GECCO, the authors agree that substantially the same material will not be published by another conference in the evolutionary computation field.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-2012

For detailed instructions, including categories, keywords, and formatting requirements, visit http://www.sigevo.org/gecco-2012. Be sure to check the web page for changes that may appear as the paper submission deadline approaches.

Follow us at www.twitter.com/GECCO2012

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following us!

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 09, 2012
- * Register at least one author to attend the conference by Monday, April 09, 2012
- * Attend the conference (at least one author)
- * Present the accepted paper at the conference

More Information

Visit www.sigevo.org/gecco-2012 for information about deadlines, student travel grants, hotel reservations, student housing, the graduate student workshop, the latest list of topics, late-breaking papers, and more. For matters of science and program content, contact Conference Chair Jason Moore at jason.h.moore@dartmouth.edu For general help and administrative matters contact GECCO support at gecco2012@sigevolution.org

About the Conference Venue

Philadelphia is a major historical city in the United States and the perfect GECCO destination. It is served by many low-cost airlines, offering a wide range of flight deals, and provides many accommodation options. More information at http://www.visitphilly.com/



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The Genetic and Evolutionary Computation Conference (GECCO-2012) 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, memetic algorithms, hyper heuristics, 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

General Chair: Jason Moore Editor-in-Chief: Terry Soule **Proceedings Chair:** Anne Auger Local Chair: Marylyn Ritchie Publicity Chair: Xavier Llorà Tutorials Chair: Gabriela Ochoa Students Chair: Josh Bongard

Workshops Chairs: Bill Rand **Competitions Chair:** Daniele Loiacono

Evolutionary Computation in Practice: Joern Mehnen,

Thomas Bartz-Beielstein, David Davis

Business Committee: Wolfgang Banzhaf, Marc Schoenauer

Planned Program Tracks

Ant Colony Optimization and Swarm Intelligence - David Pelta, Christine Solnon

Digital Entertainment Technologies and Arts - Mike Preuss, Alan Dorin Evolutionary Combinatorial Optimization and Metaheuristics - Yew-Soon Ong, Christian Blum

Evolutionary Multiobjective Optimization - Dario Landa Silva - Frank Neumann Genetic Programming - Tina Yu, Aniko Ekart

Genetics Based Machine Learning - Wil Browne, Tim Kovacs Parallel Evolutionary Systems - Man-Leung Wong, Clara Pizzuti

Theory - Jon Rowe, Tobias Friedrich

Artificial Life/Robotics/Evolvable Hardware - Giovanni Squillero, Nicolas Bredèche **Biological and Biomedical Applications** - Stephen Smith, Alison

Motsinger-Rei

Estimation of Distribution Algorithms - José Lozano, Martin Pelikan **Evolution Strategies and Evolutionary Programming** - Silja Meyer-Nienberg, Christian Igel

Generative and Developmental Systems - Greg Hornby, René Doursat-

Search-Based Software Engineering - Shin Yoo, John Clark

Self-* Search - Gabriela Ochoa, Gisele Pappa

Gentic Algorithms - Khaled Rasheed, Daniel Tauritz

Integrative Genetic and Evolutionary Computation - Jurgen Branke, Kalyanmoy Deb

Real World Applications - Steve Gustafson, Gustavo Olaque

Planned Free Tutorials Introductory Tutorials

Genetic Algorithms

Genetic Programming

Evolutionary Computation: A unified view

Probabilistic Model-building Genetic Algorithms

Learning Classifier Systems Ant Colony Optimization

Evolution Strategies and Covariance Matrix Adaptation

Evolutionary Multiobjective Optimization

Statistical Analysis for Evolutionary Computation

Advanced Tutorials

No Free Lunch Theorems

Computational Complexity and EC

Evolving Quantum Computer Algorithms

Advanced Evolutionary Multiobjective Optimization

Constraint-Handling Techniques used with Evolutionary Algorithms

Representations for evolutionary algorithms

Fitness Landscape Analysis

Large Scale Data Mining using Genetics-Based Machine Learning

Evolutionary Game Theory

Synthetic Biology

To Propose a Tutorial or Workshop

A detailed call for workhop and tutorial proposals will be posted later so stay tuned! Meanwhile, for enquiries regarding tutorials contact gecco2012tutorials@sigevolution.org while for enquiries about workshops contact gecco2012workshops@sigevolution.org

For general help and administrative matters contact GECCO support at gecco2012@sigevolution.org

SIGEVO Executive Committee

Anne Auger Wolfgang Banzhaf Juergen Branke Kalyanmoy Deb Kenneth DeJong Anna Esparcia-Alcazar Erik D. Goodman John Holland John Koza

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