**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

---

**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 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.

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 However, if the submitted paper is accepted by GECCO, the authors agree that substantially the same material will not be published by another conference in the evolutionary computation field.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](http://www.sigevo.org/gecco-2012) for detailed instructions, including categories, keywords, and formatting requirements. Visit [http://www.sigevo.org/gecco-2012](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 on Twitter: [www.twitter.com/GECCO2012](http://www.twitter.com/GECCO2012)

Visit [www.twitter.com/GECCO2012](http://www.twitter.com/GECCO2012) and start 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](http://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](mailto:jason.h.moore@dartmouth.edu) For general help and administrative matters contact GECCO support at [gecco2012@sigevolution.org](mailto: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/](http://www.visitphilly.com/)
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:** Marylin Ritchie
- **Publicity Chair:** Xavier Llorà
- **Tutorials Chair:** Gabriela Ochoa
- **Students Chair:** Josh Bongard
- **Workshops Chairs:** Bill Rand
- **Competitions Chair:** Daniele Loliaco

**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-Nieben, Christian Igel
- **Generative and Developmental Systems** - Greg Hornby, René Doursat
- **Real World Applications** - Steve Gustafson, Gustavo Olague
- **Search-Based Software Engineering** - Shin Yoo, John Clark
- **Self-* Search** - Gabriela Ochoa, Gisele Pappa
- **Gentic Algorithms** - Khaleed Rasheed, Daniel Tauritz
- **Integrative Genetic and Evolutionary Computation** - Jurgen Branke, Kalyanmoy Deb

**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 workshop and tutorial proposals will be posted later so stay tuned! Meanwhile, for enquiries regarding tutorials contact gecco2012tutorials@sigevo.org while for enquiries about workshops contact gecco2012workshops@sigevo.org

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

**SIGEVO Executive Committee**
- Anne Auger
- Wolfgang Banzhaf
- Juergen Branke
- Kalyanmoy Deb
- Kenneth DeJong
- Anna Esparcia-Alcazar
- Erik D. Goodman
- John Holland
- John Koza
- Pier Luca Lanzi
- Una-May O'Reilly
- Martin Pelikan
- Riccardo Poli
- Franz Rothlauf
- Marc Schoenauer
- Lee Spector
- Kenneth Stanley
- Darrell Whitley (chair)

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

---

**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 Organizers
- **General Chair:** Jason Moore
- **Editor-in-Chief:** Terry Soule
- **Proceedings Chair:** Anne Auger
- **Local Chair:** Marylin Ritchie
- **Publicity Chair:** Xavier Llorà
- **Tutorials Chair:** Gabriela Ochoa
- **Students Chair:** Josh Bongard
- **Workshops Chairs:** Bill Rand
- **Competitions Chair:** Daniele Loliaco

**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-Nieben, Christian Igel
- **Generative and Developmental Systems** - Greg Hornby, René Doursat
- **Real World Applications** - Steve Gustafson, Gustavo Olague
- **Search-Based Software Engineering** - Shin Yoo, John Clark
- **Self-* Search** - Gabriela Ochoa, Gisele Pappa
- **Gentic Algorithms** - Khaleed Rasheed, Daniel Tauritz
- **Integrative Genetic and Evolutionary Computation** - Jurgen Branke, Kalyanmoy Deb

**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 workshop and tutorial proposals will be posted later so stay tuned! Meanwhile, for enquiries regarding tutorials contact gecco2012tutorials@sigevo.org while for enquiries about workshops contact gecco2012workshops@sigevo.org

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

**SIGEVO Executive Committee**
- Anne Auger
- Wolfgang Banzhaf
- Juergen Branke
- Kalyanmoy Deb
- Kenneth DeJong
- Anna Esparcia-Alcazar
- Erik D. Goodman
- John Holland
- John Koza
- Pier Luca Lanzi
- Una-May O'Reilly
- Martin Pelikan
- Riccardo Poli
- Franz Rothlauf
- Marc Schoenauer
- Lee Spector
- Kenneth Stanley
- Darrell Whitley (chair)

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