

CALL FOR PAPERS FOR

2006 GENETIC AND EVOLUTIONARY COMPUTATION CONFERENCE (GECCO-2006)

July 8-12, 2006 (Saturday-Wednesday)

Seattle, Washington, USA

-----  
Largest Conference in the Field of Genetic and Evolutionary Computation  
-----

PAPER SUBMISSION DEADLINE: Wednesday, January 18, 2006

-----  
Organized by ACM SIG-EVO

[www.sigevo.org/GECCO-2006](http://www.sigevo.org/GECCO-2006)

-----  
Renaissance Seattle Hotel

Seattle, Washington, USA

-----  
15th International Conference on Genetic Algorithms (ICGA)  
and the 11th Genetic Programming Conference (GP)  
-----

The Genetic and Evolutionary Computation Conference (GECCO-2006) 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, evolutionary combinatorial optimization, coevolution, artificial immune systems, and more.

Each paper submitted to GECCO-2006 will be rigorously reviewed, in a double-blind review process, by one of the 16 separate and independent specialized program committees that make final decisions, subject only to conference-wide space limitations and procedures.

GECCO ORGANIZERS

General Chair:	Mike Cattolico
Proceedings Editor-In-Chief:	Maarten Keijzer
Business Committee:	David E. Goldberg
	Erik Goodman
	John R. Koza
	Una-May O'Reilly
	Mike Cattolico
Workshops Chair:	Jano van Hemert
Late-Breaking Papers Chair:	Jörn Grahl
Competitions Chair:	Riccardo Poli

Student Workshop Chair: Terry Soule  
 Evolutionary Computation in  
 Practice Chairs: Cem Baydar, Accenture  
 Tina Yu, Chevron

## 16 PROGRAM TRACKS

Genetic Algorithms: Franz Rothlauf, Dirk Thierens  
 Genetic Programming: Conor Ryan  
 Evolution Strategies and  
 Evolutionary Programming: Dirk Arnold  
 Real-World Applications: Vladan Babovic  
 Learning Classifiers and other  
 Genetics-Based Machine Learning: Martin Butz  
 Evolvable Hardware: Greg Hornby  
 Biological Applications: James Foster, Jason Moore  
 Artificial Life, Evolutionary Robotics,  
 Adaptive Behavior: Hod Lipson  
 Ant Colony Optimization and  
 Swarm Intelligence: Christian Blum  
 Evolutionary Combinatorial Optimization: Günter Raidl  
 Coevolution: Sevan G. Ficici  
 Artificial Immune Systems: Dipankar Dasgupta  
 Evolutionary Multiobjective Optimization: Carlos A. Coello Coello,

Arturo Hernandez-Aguirre  
 Meta-heuristics and Local Search: Jean-Paul Watson  
 Estimation of Distribution Algorithms: Peter Bosman  
 Search-Based Software Engineering: Phil McMinn

## ACM SIGEVO OFFICERS

Chair: Erik D. Goodman  
 Vice Chair: John R. Koza  
 Secretary: Erick Cantú-Paz  
 Treasurer: Wolfgang Banzhaf

## ACM SIGEVO EXECUTIVE COMMITTEE

Erik D. Goodman (chair)  
 Erick Cantú-Paz John R. Koza  
 Wolfgang Banzhaf Una-May O'Reilly  
 Kalyanmoy Deb Ingo Rechenberg  
 Kenneth De Jong Marc Schoenauer  
 Marco Dorigo Lee Spector  
 David E. Goldberg Darrell Whitley  
 John H. Holland Annie S. Wu

## ONE CONFERENCE - MANY MINI-CONFERENCES

### Program Tracks

Three days of presentations of the latest high-quality results in 16 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.

### FREE TUTORIALS

#### Introductory Tutorials ...

Genetic Algorithms	Erik Goodman
Genetic Programming	John Koza
Ant Colony Optimization	Christian Blum
Evolution Strategies	Thomas Bäck
Learning Classifier Systems	Tim Kovacs
Particle Swarm Intelligence	Russell Eberhart
Probabilistic Model-Building GAs	Martin Pelikan
A Unified Approach to EC	Kenneth De Jong
Coevolution	Sevan Ficici, Anthony Bucci

#### Advanced Tutorials ...

Genetic Algorithm Theory	Jonathan Rowe
Genetic Programming Theory	Riccardo Poli
Evolvable Hardware	Adrian Stoica
Evolvable Hardware Applications	Tetsuya Higuchi
No Free Lunch	Darrell Whitley
Representations	Franz Rothlauf
Evolutionary Multiobjective Optimization	Eckart Zitzler, Stefan Bleuler
Bioinformatics	James Foster, Jason Moore
Industrial Evolutionary Computing	Arthur Kordon
Evolutionary Practical Optimization	Kalyanmoy Deb
Parameter Setting in Genetic Algorithms	Fernando Lobo
Constraint Handling Techniques used with Evolutionary Algorithms	Carlos Coello Coello
Spatially Structured EAs	Marco Tomassini
Systems Biology and EC	Stefan Bleuler, Philip Zimmermann, Eckart Zitzler
Coevolution	Edwin de Jong, Paul Wiegand, Kenneth Stanley

#### Specialized Techniques and Applications ...

Evolvable Hardware Applications	Tetsuya Higuchi
Evolving Neural Networks	Risto Miikkulainen
Experimental Research in EC	Mike Preuss, Thomas Bartz-Beielstein

Fitness Landscapes and Problem Difficulty Jean-Paul Watson  
Genetic and Evolutionary Computer Vision Stefano Cagnoni  
Spatially Structured EAs Marco Tomassini  
Quantum Computing Lee Spector  
Evolution and Resiliency Terry Soule  
Systems Biology and EC Stefan Bleuler,  
Philip Zimmermann,  
Eckart Zitzler  
Evolutionary Design Ian Parmee

#### HOTEL INFORMATION

Renaissance Seattle Hotel  
515 Madison Street  
Seattle, WA 98104 USA  
Toll-Free: 800-546-9184  
Phone: 206-583-0300  
Fax: 206-624-8125  
URL: [www.renaissancehotels/seasm](http://www.renaissancehotels/seasm)

#### ADDITIONAL INFORMATION

Visit [www.sigevo.org/GECCO-2006](http://www.sigevo.org/GECCO-2006) for information about tutorials, workshops, papers submission and deadlines, paper review process, electronic submission procedures, formatting details, student travel grants, hotel reservations, travel discounts, student housing, graduate student workshop, late-breaking papers, etc.

#### CONTACTS

Conference chair. Mike Cattolico: [mike@tigerscience.com](mailto:mike@tigerscience.com) .  
Include "GECCO" in your subject line.  
GECCO is sponsored by the Association for Computing Machinery (ACM) Special Interest Group of Genetic and Evolutionary Computation (SIGEVO). Contact ACM SIG services, 1515 Broadway, New York, NY 10036.  
Phone: 800-342-6626 in USA and Canada and 202-626-0500 international.

--

Erik D. Goodman, Professor, Elec. & Comp. Engr.; Mech. Engr.  
Co-Director, Genetic Algorithms Research and Applications Group (GARAGe)  
Senior Fellow, Internat. Soc. for Genetic and Evolutionary Computation  
Chair, ACM SIGEVO, Special Interest Group on Genetic & Evolutionary Computation  
Mailing Address: Dept. of Electrical and Computer Engineering  
Michigan State University, East Lansing, MI 48824 USA  
Phone: (517)355-6453 Fax: (517)353-1980 Email: [goodman@egr.msu.edu](mailto:goodman@egr.msu.edu)  
Home Page: [www.egr.msu.edu/~goodman](http://www.egr.msu.edu/~goodman)

-----  
Don't miss: 2006 Genetic & Evolutionary Computation Conference, GECCO-2006, Seattle, Washington, July 8-12 (Sat.-Wed.), chair: Mike Cattalico,

[mike@tigerscience.com](mailto:mike@tigerscience.com) . For more info about GECCO-2006 or SIGEVO,  
please see [www.acm.org/sigevo](http://www.acm.org/sigevo)

-----