The Genetic and Evolutionary Computation Conference 2022 will present the latest high-quality results in genetic and evolutionary computation. Topics include: genetic algorithms, genetic programming, ant colony optimization and swarm intelligence, complex systems (artificial life, artificial immune systems, generative and developmental systems, evolutionary robotics, evolvable hardware), digital entertainment technologies and arts, evolutionary combinatorial optimization and metaheuristics, evolutionary machine learning, neuroevolution, evolutionary multiobjective optimization, evolutionary numerical optimization, hybrid approaches, real world applications, search-based software engineering, theory and more.

Call for Papers

Each paper submitted to GECCO 2022 will be rigorously evaluated in a double-blind review process. The evaluation is on a per-track basis, ensuring high interest and expertise of the reviewers. Review criteria include significance of the work, technical soundness, novelty, clarity, writing quality, and sufficiency of information to permit replication, if applicable. All accepted papers will be published in the ACM Digital Library.

By submitting a paper, the authors agree that, if their paper is accepted, they will:
1. Submit a final, revised, camera-ready version to the publisher on or before the camera-ready deadline.
2. Register at least one author to attend the conference on or before the advance registration deadline.
3. Participate in the conference (at least one author).
4. Present the accepted paper at the conference.

Researchers who have recently published their work in top-tier conferences and journals are invited to submit abstracts to the Hot Off the Press track. In addition, the Late Breaking Abstracts Workshop welcomes submissions of abstracts describing late-breaking developments. In both cases, contributions will be selected based on quality and interest to the GECCO community.

Call for Workshops and Tutorials

The GECCO 2022 Organizing Committee invites proposals for workshops. GECCO workshops provide the possibility to jointly develop visions and exchange ideas in an informal setting, especially if focused on an emerging research field or interdisciplinary research area. Please visit the GECCO 2022 website for deadlines. Workshop organizers are responsible for coordination, publicity, and the reviewing of submitted papers. Accepted workshop papers will be published in the ACM Digital Library in a companion volume to the conference proceedings.

The GECCO 2022 Organizing Committee invites proposals for tutorials. They will be reviewed by the GECCO 2022 Organizing Committee based on their significance to the conference, the breadth and depth of the topics, and the expertise and credentials of the presenters. Tutorials will be open to all attendees of the conference. Slide sets of accepted tutorials will be published in the ACM Digital Library as part of a companion volume to the conference proceedings. Please visit the GECCO 2022 website to check for deadlines.
Program Tracks
Three days of presentations of the latest high-quality results in 13 separate and independent program tracks specializing in various aspects of genetic and evolutionary computation.

- ACO-SI - Ant Colony Optimization and Swarm Intelligence
- CS - Complex Systems (Artificial Life, Artificial Immune Systems, Generative and Developmental Systems, Evolutionary Robotics, Evolvable Hardware)
- ECOM - Evolutionary Combinatorial Optimization and Metaheuristics
- EML - Evolutionary Machine Learning
- EMO - Evolutionary Multiobjective Optimization
- ENUM - Evolutionary Numerical Optimization
- GA - Genetic Algorithms
- GECH - General Evolutionary Computation and Hybrids
- GP - Genetic Programming
- NE - Neuroevolution
- RWA - Real World Applications
- SBSE - Search-Based Software Engineering
- THEORY - Theory

Free Tutorials and Workshop
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.

SIGEVO Summer School
The SIGEVO Summer School starts before the conference and welcomes students willing to participate in lectures, discussions, presentations, joint works, and interact with world-class researchers.

Online Presence
To address the growing interest in remote participation, selected events of GECCO 2022 will be made available online. Furthermore, remote participation will be possible. As conference tools, Whova and Gather will be used. Details will be provided in time on the conference website and via Twitter.

GECCO Organizers
- General Chair: Markus Wagner
- Editor-in-Chief: Jonathan Fieldsend
- Local Chair: Erik Hemberg
- Business Committee: Anne Auger, Peter A.N. Bosman

About the Conference Venue
Boston, the 24th most populous city in the US, is one of the oldest municipalities in the United States. Its rich history attracts many tourists, and its walking trails, museums, art galleries, sports events, and historic sites all compete for your time in Boston. GECCO 2022 will be held at the Renaissance Boston Waterfront Hotel. Between sessions, you can explore the vibrant Seaport District right outside the hotel doors. The conference location provides easy access to Logan Airport and is just minutes from Boston Harbor, the Institute of Contemporary Art (ICA), Blue Bank Pavilion and TD Garden, the home arena of the Boston Celtics. Find out more about Boston at https://gecco-2022.sigevo.org/Venue.

The hotel will provide a safe and inclusive environment, and there will be a conference attendee discount for rooms at the hotel at USD199 + VAT. A discount code will be posted.

Important Dates
- Competition/Tutorial/Workshop submission: November 5, 2021
- Notification of Competition/Tutorial/Workshop acceptance: December 3, 2021
- Abstract submission: January 27, 2022
- Paper submission: February 3, 2022
- Notification of paper acceptance: March 25, 2022
- GECCO 2022 Conference: July 9-13, 2022

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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 +1-212-626-0500