

GI 2024

The 13th International Workshop on Genetic Improvement

<https://geneticimprovementofsoftware.com/events/icse2024>

Co-located with the 46th IEEE/ACM
International Conference on Software Engineering,
ICSE 2024, in Lisbon, Portugal
Tuesday 16. Apr 2024 (one day)



Paper submission deadline: Thursday 7th December 2023

<https://gi-at-icse2024-workshop.hotcrp.com/>

Workshop Scope

We invite submissions that discuss recent developments in all areas of research on, and applications of, Genetic Improvement. GI is the premier workshop in the field and provides an opportunity for researchers interested in automated program repair and software optimisation to disseminate their work, exchange ideas and discover new research directions.

Topics of interest include both the theory and practice of Genetic Improvement. Applications include, but are not limited to, using GI to:

- Improve efficiency
- Decrease memory consumption
- Decrease energy consumption
- Transplant new functionality
- Specialise software
- Generate multiple versions of software
- Improve low level or binary code
- use of AI/large language models with GI
- Repair bugs
- GI techniques in industrial settings

Keynote

The keynote will be given by Prof. Shin Yoo, head of Computational Intelligence for SE in Korea Advanced Institute of Science Technology (KAIST), Korea.

Key Dates

Submission	7 Dec 2023 (Thu)
Notification	11 Jan 2024 (Thu)
Camera-ready	25 Jan 2024 (Thu)
Workshop	16 Apr 2024 (Tue)

Call for Submissions

The workshop emphasises interaction and discussion between participants, and we encourage authors to submit early and in-progress work.

We invite submissions of two types of paper:

- Research papers (8 pages)
- Position papers (2 pages)

Papers should be submitted electronically via HotCRP double-blind as PDFs in the ICSE conference format. Accepted papers must be presented at GI 2024 and will appear in the ICSE workshops volume. The official publication date of the workshop proceedings is when the proceedings are made available by ACM. This may be up to two weeks prior to the first day of ICSE 2024, and affects the deadline for patent filings related to published work. Authors of selected publications will be invited to submit an extended version of their papers to ASE Journal's Special Issue on Genetic Improvement

Attendance Expectation

The workshop is expected to be held in-person. In case of a virtual or hybrid event, virtual presentations may be possible. As with GI 2020-23, recordings will be made available on YouTube:

https://www.youtube.com/@gi_workshop

Workshop Chairs

Gabin An	agb94@kaist.ac.kr
Aymeric Blot	aymeric.blot@univ-rennes.fr
Vesna Nowack	vnowack@imperial.ac.uk
Oliver Krauss	oliver.krauss@fh-hagenberg.at
Justyna Petke	j.petke@ucl.ac.uk