Post-doctoral Research Fellow Positions in Automated Program Repair at NUS

Applications are invited for several post-doctoral positions at the National University of Singapore (NUS) in the area of Automated Program Repair

These positions will be part of a Singapore Ministry of Education (MoE) Tier 3, multi-year research program named **"Automated Program Repair"** which has been funded 2022-2027. This is a large research program involving several research projects in analysis, verification, test generation and applications related to program repair.

To see work done on program repair at NUS, kindly see the webpage
*https://www.comp.nus.edu.sg/~abhik/projects/Repair/index.html *

In the new program, we will take this work forward further. The vision of our research program is to retain the workflows of software construction as they exist today in the form of Continuous Integration (CI) systems, and yet support automated software evolution with formal correctness guarantees, thereby engendering trust in automatically generated code. Our research program can help achieve such a vision via analysis, verification, and test generation. Applications of repair studied in the program will include security vulnerability repair, patch transplantation across versions of major software systems such as Linux, as well as the use of repair in intelligent tutoring system that we have developed at NUS, for teaching programming.

The program will start latest by September 2022, and we request interested applicants to reach out to us early with the following information. Interested applicants need to have a PhD degree or should be submitting PhD thesis soon.

- CV, including publications

- research statement

- names of two referees

The faculty members involved in this research program are Wei-Ngan Chin, Abhik Roychoudhury (Lead PI) and Ilya Sergey, all from NUS Computer Science. The postdoc will be located in the Computer Science Department of NUS, which enjoys a high degree of academic reputation.

Emails by interested applicants may be directed to Abhik Roychoudhury

abhik@comp.nus.edu.sg