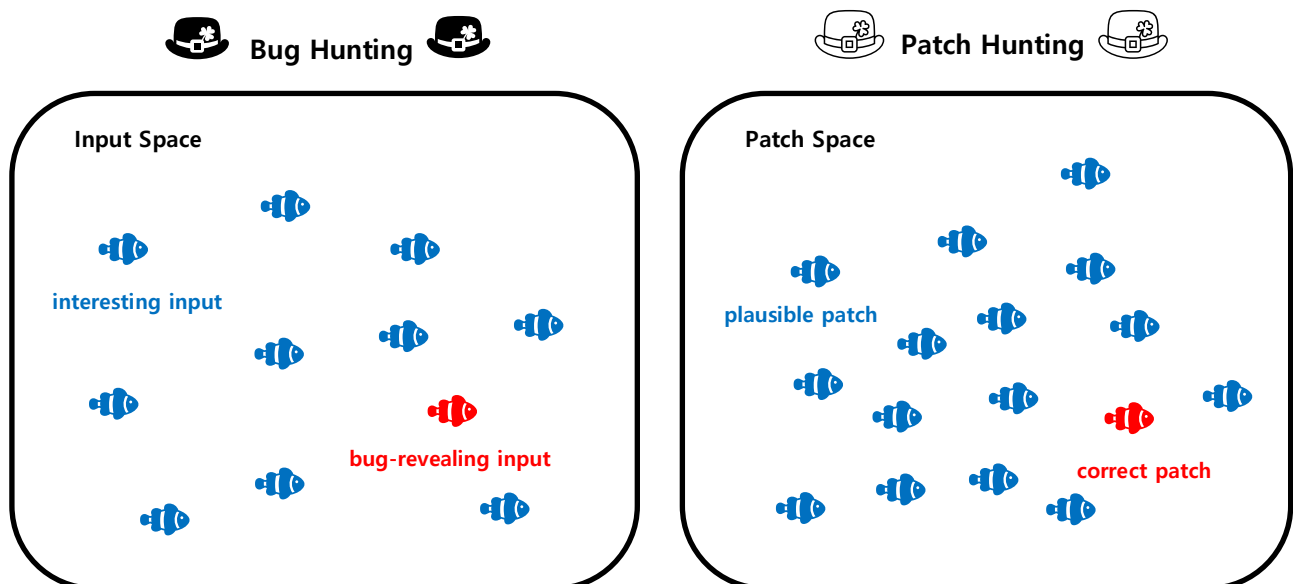


Winter 2024-2025 Internship Program

Professor	Jooyong Yi
Lab	LOFT (Lab of Software)
Lab Website	https://www.jooyongyi.com/
Sub-track of Project Topic	<input checked="" type="checkbox"/> Systems <input checked="" type="checkbox"/> Theory and Principles of SW <input type="checkbox"/> Artificial Intelligence & Data Science

Project Topic: Efficient Patch Hunting

Project Background



“Where there is light, there must be shadow,” said Haruki Murakami. The opposite should also be true: where there is shadow, a.k.a., a bug, there must be light, a.k.a., a patch.

Modern bug-hunting techniques, such as fuzzing, automatically discover numerous bugs day and night. To maintain balance, we also need techniques that can discover patches with equal or greater efficiency. LOFT is at the frontier of developing patch-hunting techniques. At LOFT, we are seeking well-motivated undergraduate interns who are eager to join our continuous effort to advance this field. If you are interested, check out the following papers in Google Scholar:

1. Automated Program Repair from Fuzzing Perspective, ISSTA 2023
2. Enhancing the Efficiency of Automated Program Repair via Greybox Analysis, ASE 2024

The second paper, which replaces the record we set up in the first paper, is co-authored by Yechan Park, an undergraduate intern in 2024. Who will be the next to break the record?

Requirements

Strong interest in research on software

Conditions

- Guided by a graduate student mentor
- Equipment, including a computer and a desk, will be provided
- Competitive salary proportional to your contribution to the project

Inquiry

If you have any questions about this internship position, send an email to Prof. Jooyong Yi
<jooyong@unist.ac.kr>