JUYEON YOON

PhD Candidate, *School of Computing* in KAIST

⌂ https://coinse.io/members/juyeon

⌗ https://github.com/greenmonn

EDUCATION

KAIST, Daejeon   *March 2022 - Current*
PhD Candidate of Computer Science

KAIST, Daejeon   *March 2020 - February 2022*
Master of Computer Science

KAIST, Daejeon   *March 2014 - February 2020*
Bachelor of Computer Science

RESEARCH INTERESTS

· Multi-Agent LLM-based Systems for Software Engineering *(AI for SE)*
· Testing and Quality Assurance of LLM-based Applications *(SE for AI)*

PUBLICATIONS

Peer-Reviewed Conference and Workshop Papers

*: equal contribution

◇ Felix Dobslaw, Robert Feldt, **Juyeon Yoon**, and Shin Yoo. Challenges in Testing Large Language Model Based Software: A Faceted Taxonomy. In *arXiv preprint arXiv:2503.00481*, 2025

◇ **Juyeon Yoon**, Robert Feldt, and Shin Yoo. Adaptive Testing for LLM-Based Applications: A Diversity-based Approach. In *Proceedings of the 8th IEEE International Workshop on Next Level of Test Automation (NEXTA 2025)*, 2025

◇ **Juyeon Yoon**, Seah Kim, Somin Kim, Sukchul Jung, and Shin Yoo. Integrating LLM-Based Text Generation with Dynamic Context Retrieval for GUI Testing. *Proceedings of the 16th IEEE International Conference on Software Testing, Verification and Validation (ICST 2025)*, 2025

◇ **Juyeon Yoon**, Robert Feldt, and Shin Yoo. Intent-Driven Mobile GUI Testing with Autonomous Large Language Model Agents. In *Proceedings of the 16th IEEE International Conference on Software Testing, Verification and Validation (ICST 2024)*, 2024

◇ Gabin An, **Juyeon Yoon**, Thomas Bach, Jingun Hong, and Shin Yoo. Just-in-Time Flaky Test Detection via Abstracted Failure Symptom Matching. In *Proceedings of the 40th International Conference on Software Maintenance and Evolution (ICSME 2024 Industry Track)*, 2024

◇ Robert Feldt, Sungmin Kang, **Juyeon Yoon**, and Shin Yoo. Towards Autonomous Testing Agents via Conversational Large Language Models. In *Proceedings of the 38th IEEE/ACM International Conference on Automated Software Engineering (ASE 2023)*, 2023

◇ Sungmin Kang*, **Juyeon Yoon***, and Shin Yoo. Large Language Models are Few-shot Testers: Exploring LLM-based General Bug Reproduction. In *Proceedings of the 45th International Conference on Software Engineering (ICSE 2023)*, 2023

◇ Gabin An*, **Juyeon Yoon***, Jeongju Sohn, Jingun Hong, Dongwon Hwang, and Shin Yoo. Automatically Identifying Shared Root Causes of Test Breakages in SAP HANA. In *Proceedings of the 44th International Conference on Software Engineering: Software Engineering in Practice (ICSE-SEIP 2022)*, 2022

◇ **Juyeon Yoon**, Seungjoon Chung, Kihyuck Shin, Jinhan Kim, Shin Hong, and Shin Yoo. Repairing Fragile GUI Test Cases Using Word and Layout Embedding. In *2022 IEEE Conference on Software Testing, Verification and Validation (ICST 2022)*, 2022

◇ **Juyeon Yoon** and Shin Yoo. Enhancing Lexical Representation of Test Coverage for Failure Clustering. In *2021 36th IEEE/ACM International Conference on Automated Software Engineering Workshops (ASEW 2021)*, 2021

◇ Gabin An, **Juyeon Yoon**, and Shin Yoo. Searching for Multi-fault Programs in Defects4J. In *Search-Based Software Engineering: 13th International Symposium (SSBSE 2021)*, 2021

◇ Junghyun Lee, Chani Jung, Yoo Hwa Park, Dongmin Lee, **Juyeon Yoon**, and Shin Yoo. Preliminary Evaluation of SWAY in Permutation Decision Space via a Novel Euclidean Embedding. In *Search-Based Software Engineering: 13th International Symposium (SSBSE 2021)*, 2021

◇ Eunho Cho, **Juyeon Yoon**, Dongman Lee, and Doo-Hwan Bae. DNN Model Deployment on Distributed Edges. In *21st International Conference on Web Engineering Workshops (ICWE 2021)*, 2021

Journal Papers

◇ Sungmin Kang*, **Juyeon Yoon***, Nargiz Askarbekkyzy, and Shin Yoo. Evaluating Diverse Large Language Models for Automatic and General Bug Reproduction. In *IEEE Transactions on Software Engineering*, 50(10):2677–2694, 2024

Book Chapter

◇ 과학하는 용기 (Courage To Do Science). Salim Friends, 2016

WORKING EXPERIENCE

Artifriends Inc.   Jun 2017 – Dec 2018
Web Developer

· Developed a web-based asset management service and a Blockchain client software.

SK Hynix   Jun 2016 – Jul 2016
Application Engineering Intern

· Assisted in SSD hardware testing by analyzing anomalous packets in the SATA command layer protocol.

TECHNICAL STRENGTHS

Programming Language	Python, JavaScript, Golang, Java
Tools	Git, Docker

HONORS & AWARDS

Google Women Techmakers Scholarship   2019

· Selected as a recipient of 2019 APAC Women Techmakers Scholars Program

Dean's List   Autumn 2016

· Top 3% Academic Performance

TEACHING EXPERIENCE

CS454: AI Based Software Engineering   Autumn 2020
Teaching Assistant

· A course about metaheuristic optimisation algorithms for software engineering

CS101: Introduction to Programming   Spring 2020 - Spring 2022
Teaching Assistant

· A course for freshmen to teach programming skills and computational thinking

ACTIVITIES

VOK: Voice of KAIST

· KAIST official broadcasting club