Hyunjae Suh

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Summary

Ph.D. student specializing in software engineering with a focus on LLM-generated source code. Experienced in conducting in-depth research to advance understanding and improve the quality of LLM-generated code.

Education

University of California, Irvine — *Irvine, CA*
Ph.D. in Software Engineering — *Sep 2023 – Present*

Kookmin University — *Seoul, South Korea*
BS in Computer Science — *Mar 2017 – Aug 2023*

Experience

Ph.D. Student — *Irvine, CA*
University of California, Irvine — *Sep 2023 – Present*

- Conducted research on LLM-generated source code, leading to publication in ICSE 2025.
- Focused on investigating the characteristics of LLM-generated source code, including its accessibility and similarity to human-written code.

Graduate Research Assistant — *Remote*
Ebay — *Aug 2023 – Dec 2023*

- Worked on automated commit message generation using LLMs.

Publications

An Empirical Study on Automatically Detecting AI-Generated Source Code: How Far Are We?
Hyunjae Suh, Mahan Tafreshipour, Jiawei Li, Adithya Bhattiprolu, Iftekhar Ahmed
The IEEE/ACM International Conference on Software Engineering 2025 [ICSE]

Does the Order of Fine-tuning Matter and Why?
Qihong Chen, Jiawei Li, **Hyunjae Suh**, Lianghao Jiang, Zheng Zhou, Jingze Chen, Jiri Gesi, Iftekhar Ahmed
https://arxiv.org/abs/2410.02915

Projects

Accessibility of LLM-generated Source Code

- Conducted research to evaluate the accessibility of source code generated by LLMs in the web domain.
- Applied prompting techniques to generate code with LLMs, resulting in enhanced accessibility.
- Utilized accessibility evaluation tools to assess and ensure compliance with WCAG 2.1 guidelines.

Detection of LLM-generated Source Code

- Proposed techniques that include fine-tuning LLMs, leveraging embeddings, and analyzing code features to accurately identify LLM-generated code.
- Enhanced the performance of detecting LLM-generated source code.

The impact of Fine-tuning Order on Language Models for Software Engineering

- Developed machine learning pipelines for fine-tuning transformers with various combinations of software engineering tasks to evaluate their impact on final task performance.

Teaching Experience

University of California, Irvine *Irvine, CA*
Teaching Assistant *Sep 2023 – Present*

- IN4MATX 115 - Software Testing, Analysis, and Quality Assurance
- ICS 10 - How Computers Work
- ICS 32 - Programming with Software Libraries