

Yuchao Huang

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EDUCATION

Institute of Software Research, Chinese Academy of Sciences Beijing, China
Ph.D., State Key Laboratory of Intelligent Game Sep 2022 - Jul 2025
Major: Software Engineering
Advisor: Qing Wang

Institute of Software Research, Chinese Academy of Sciences Beijing, China
M.S., State Key Laboratory of Intelligent Game Sep 2019 - Jul 2022
Major: Software Engineering
Advisor: Qing Wang

University of Electronic Science and Technology of China Chengdu, China
B.S., School of Computer Science and Engineering Sep 2015 - Jul 2019
Major: Computer Science and Technology

RESEARCH EXPERIENCE

Institute of Software Research, Chinese Academy of Sciences Beijing, China
Doctoral Student, State Key Laboratory of Intelligent Game Sep 2015 - Jul 2022

- Developed three automated methods to reproduce Android crash reports
- Collected 102 papers on the application of LLMs in software testing and co-authored a survey on TSE
- Published five papers in top SE conferences and journals such as ICSE, FSE, TSE

PUBLICATIONS

- Junjie Wang, **Yuchao Huang**, Chunyang Chen, Zhe Liu, Song Wang, Qing Wang (2024). Software Testing With Large Language Models: Survey, Landscape, and Vision. IEEE Trans. Software Eng..
- **Yuchao Huang**, Junjie Wang, Zhe Liu, Yawen Wang, Song Wang, Chunyang Chen, Yuanzhe Hu, Qing Wang (2024). CrashTranslator: Automatically Reproducing Mobile Application Crashes Directly from Stack Trace. Proceedings of the 46th IEEE/ACM International Conference on Software Engineering, ICSE 2024, Lisbon, Portugal, April 14-20, 2024.
- **Yuchao Huang**, Junjie Wang, Zhe Liu, Song Wang, Chunyang Chen, Mingyang Li, Qing Wang (2023). Context-aware Bug Reproduction for Mobile Apps. 45th IEEE/ACM International Conference on Software Engineering, ICSE 2023, Melbourne, Australia, May 14-20, 2023.
- Moshi Wei, **Yuchao Huang**, Jinqiu Yang, Junjie Wang, Song Wang (2023). CoCoFuzzing: Testing Neural Code Models With Coverage-Guided Fuzzing. IEEE Trans. Reliab..

- **Yuchao Huang**, Moshi Wei, Song Wang, Junjie Wang, Qing Wang (2022). Yet another combination of IR- and neural-based comment generation. Inf. Softw. Technol..
- Junjie Wang, **Yuchao Huang**, Song Wang, Qing Wang (2022). Find bugs in static bug finders. Proceedings of the 30th IEEE/ACM International Conference on Program Comprehension, ICPC 2022, Virtual Event, May 16-17, 2022.
- Moshi Wei, Nima Shiri Harzevili, **Yuchao Huang**, Junjie Wang, Song Wang (2022). CLEAR: Contrastive Learning for API Recommendation. 44th IEEE/ACM 44th International Conference on Software Engineering, ICSE 2022, Pittsburgh, PA, USA, May 25-27, 2022.
- Moshi Wei, **Yuchao Huang**, Junjie Wang, Jiho Shin, Nima Shiri Harzevili, Song Wang (2022). API recommendation for machine learning libraries: how far are we?. Proceedings of the 30th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering, ESEC/FSE 2022, Singapore, Singapore, November 14-18, 2022.

PATENTS

- Context-aware Crash reproduction method and device based on multimodal matching model (Patent No. 2023109488819)

PRESENTATIONS

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|---|------|
| Poster: Annual Academic Conference of Institute of Software in 2022 | 2022 |
| Oral: 45th International Conference on Software Engineering (ICSE 2023) | 2023 |
| Poster: Annual Academic Conference of Institute of Software in 2023 | 2023 |
| Oral: 46th International Conference on Software Engineering (ICSE 2024) | 2024 |
| Poster: Annual Academic Conference of Institute of Software in 2024 | 2024 |

HONORS & AWARDS

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| First-Class Scholarship of the University of Chinese Academy of Sciences | 2021 |
| Distinguished Paper Award in ICPC 2022 | 2022 |
| University of Chinese Academy of Sciences Triple-A Student | 2023 |
| Outstanding Poster Award at the 2023 Academic Annual Meeting of ISCAS | 2023 |

REFERENCES

Qing Wang
 Institute of Software Research, Chinese Academy of Sciences
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 Principal Advisor
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