Guangbei Yi

Seeking a PhD position in AI, ML, Operating Systems, and Computer Security.

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Education

BACHELOR OF SCIENCE | EST. MAY 2024 | WASHINGTON STATE UNIVERSITY

- Major: Software Engineering with Cumulative GPA: 3.91.
- Related coursework: Software Design Project, Software Engineering Principles, Operating Systems and Computer Architecture, Design and analysis Algorithms, Object-Oriented Software Principles.
- Awards: Tau Beta Pi Membership Since December 2022.

BACHELOR'S DEGREE| JULY 2017 | SHAANXI UNIVERSITY OF TECHNOLOGY

- Major: Information and Computing Science (Computational Mathematics)
- Related coursework: Mathematical Analysis, Advanced Algebra, Fundamentals of Information Theory
- Awards: Chinese Collaging Computing Competition – Level 3 Award from 2015-2017 (with over 1000+ school teams around China mainland, only 5% of them achieve level 3 or above). Developed a third-person shooter game using Unity Engine with 40 minutes of gameplay experience.

Experience

RESEARCH ASSISTANT | WASHINGTON STATE UNIVERSITY | MAY 2022 - NOW

- Topic: Computer Security
- Responsibility:
  - Studying Sample Generation for Boosting Learning-Based Software Vulnerability Analyses, the paper <VGX: Large-Scale Sample Generation for Boosting Learning-Based> accepted by ICSE2024.
  - Developed 30+ fuzzing drivers for 15 multi-programming language open-source libraries for fuzz testing. Co-authored paper <POLYFUZZ: Holistic Greybox Fuzzing of Multi-Language Systems> accepted by USENIX Security '23 Summer. Discovered 5 CVEs and 6 other serious vulnerabilities.

TEACHING ASSISTANT | WASHINGTON STATE UNIVERSITY | FEB 2022 – NOW

- Provided grading and tutoring services for Software Engineering Principles and calculus courses.

TEST ENGINEER | UBISOFT | DEC 2019 – AUG 2021

- Constructed automatic test workflows for 3+ projects over 2 years, eliminating the need for daily manual test cases. Achieved dynamic auto-test game object detection with a one-time success ratio of 64% and an overall case rate of 79.5%. Simulated real user environments for testing, including user keyboard and mouse signals, as well as enabling the anti-cheat system.
- The project "Tom Clancy's The Division 2," with the help of this framework to meet government requirements, was the only large-scale Ubisoft game approved by the Chinese government for release in China mainland.