

# YU LIANG

Ph.D. Candidate of Informatics  
College of Information Sciences and Technology  
Pennsylvania State University  
Email: [yuliang@psu.edu](mailto:yuliang@psu.edu), [steveleungsly@gmail.com](mailto:steveleungsly@gmail.com)

Advised by Dr. [Peng Liu](#)  
University Park, PA 16802  
Phone: +1 (814) 876-0812  
Homepage: [steveleungyl.github.io](https://steveleungyl.github.io)

## Research Interests:

System and Software Security, Principles of Operating Systems, Principles of Compilers, DBMS

## Employment

**Ph.D. Full-time Research Assistant**  
**Ph.D. Software Engineer Intern**  
Meta Platforms, Inc.

Aug 2025 (PRED)  
May 2024 – Aug 2024

## Education:

**Ph.D. Candidate**  
Pennsylvania State University  
Major: Informatics  
Advisor: Dr. [Peng Liu](#)

Aug 2019 - Present

**Master**  
Pennsylvania State University  
Major: Engineering Science and Mechanics  
Advisor: Dr. Jian Xu

Aug 2018 – Aug 2019

## Publications:

1. Detecting Logical Bugs of DBMS with Coverage-based Guidance, **Yu Liang**, Song Liu, and Hong Hu, **USENIX Security 2022**
2. Who Goes First? Detecting Go Concurrency Bugs via Message Reordering, Ziheng Liu, Shihao Xia, **Yu Liang**, Linhai Song, and Hong Hu, **ASPLOS 2022**
3. Let the DOCTOR Decide Whom to Test: Adaptive Testing Strategies to Tackle the COVID-19 Pandemic, **Yu Liang**, Amulya Yadav, **AAMAS 2021**
4. Optimal and Non-Discriminative Rehabilitation Program Design for Opioid Addiction Among Homeless Youth. Amulya Yadav, Roopali Singh, Nikolas Siapoutis, Anamika Barman-Adhikari, & **Yu Liang**, **IJCAI 20**
5. Tackling Sequential Attacks in Security Games, Thanh H. Nguyen, Amulya Yadav, Branislav Bosansky, **Yu Liang**, **GameSEC 19**

## SKILLS:

- System Security:
  - Techniques: Fuzzing, Program Analysis, Database Management System Testing