Yuyang(Peter) Rong

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EDUCATION

UC Davis Sep 2019 - Present Computer Science

Davis, CA

· Ph.D. Candidate,

· Research interest: software security, fuzz testing, dynamic taint analysis.

ShanghaiTech University

Sep 2015 - Jun 2019

Computer Science

Shanghai, China

· Overall GPA 3.80/4(Ranking: 5/124)

EXPERIENCE

Jun 2020 - Sep 2020 **Bytedance**

Research Intern Mountain View, CA

· Focus on improving fuzzing branch coverage using principled techniques;

· Valkyrie: Improving Fuzzing Performance Through Principled Techniques submitted to Euro S&P 2022.

Bytedance Sep 2018 - Aug 2019

Research Intern Beijing, China

· Security Lab lead by Prof. Hao Chen, main work focuses on integer overflow;

- · Main focus on integer overflow, we trigger constrained integer overflow by instrumenting source code using **LLVM**;
- · IntEgrity: finding integer errors by targeted fuzzing published on SecureComm 2020;

ShanghaiTech University

Nov 2017 - Jan 2018

Lab Intern

Shanghai, China

- · By combining line search and trust region, we designed our subproblem algorithm;
- · Implemented our algorithm and subproblem algorithm using Python and did extensive experiments;
- · An inexact first-order method for constrained nonlinear optimization published on Optimization Methods and Software

ABB Group Oct 2017 - Jun 2018

Research Intern Shanghai, China

- · Group of 10, Tried to combine robot arm and an indoor mobile car;
- · Responsible for the software development of navigation system, mapping system, and state machine;
- · Python, C++ and Robot Operating System(ROS) used.

Screen++ Jun 2017 - Jun 2017

Team leader Shanghai, China

- · Proposed an application to connect all the screens in different platforms;
- · Responsible for the software development & market model; I also did the final presentation;
- · Python & Apache used. Group of 5 and won the **3rd prize** in iLab Hackathon.

AWARDS

ShanghaiTech President's Scholarship

Nov 2016 Oct 2016