# Yuyang(Peter) Rong

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### **EDUCATION**

UC Davis

Sep 2019 - Present

Computer Science Davis, CA

· Ph.D. Candidate, research interest: security, fuzzing.

#### ShanghaiTech University

Sep 2015 - Jun 2019

 $Computer\ Science$ 

Shanghai, China

· Overall GPA 3.80/4(Ranking: 5/124), **Major GPA 3.90/4**.

#### **EXPERIENCE**

Bytedance Sep 2018 - Aug 2019

Research Intern

Beijing, China

- · Security Lab lead by Prof. Hao Chen, main work focuses on integer overflow;
- · Focus on triggering constrained integer overflow by instrumenting source code using LLVM;
- · IntEgrity: finding integer errors by targeted fuzzing submitted to CODASPY 2020, currently under review.

CSST, UCLA

Jul 2018 - Sep 2018

Summer Intern Los Angeles, CA

- · Supervised by Prof. Lixia Zhang; focused on Named Data Networking(NDN);
- · Focused on OpenmHealth. Updated it with a new identity manager utilizing NDNCERT;
- · Self-taught Android development and updated the application in two months. Java and C++ used.

**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.

#### STAR Lab, ShanghaiTech

Jun 2017 - Sep 2017

Lab Intern

Shanghai, China

- · Supervised by Prof. Sören Schwertfeger in STAR Lab(Now MARS Lab);
- · Investigated on multi-robot mapping to help fasten mapping process;
- · Used VLP16, tried Gmapping, Cartographer and our modified version.

Bookends Jun 2017 - Sep 2017

Marketing Intern Shanghai, China

- · Bookends is a startup company focusing on kid's education;
- · Helped understand the children education market;
- · Established a financial model with pricing for the company.

#### PROJECT HIGHLIGHTS

Screen++ Jun 2017 - Jun 2017

Team leader Shanahai. 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.

SafeBox
Jun 2017 - Jul 2017
Team member
Shanghai, China

- · Course project for graduate level Operating System, group of 2;
- · Implemented a visualization technology to create a sandbox;
- · Using *ptrace*, we catch every system call and fail the ones that we consider unsafe.
- $\cdot$  Rust & C used on Linux.

SafeHub
Jun 2016 - Jul 2016
Team leader
Shanghai, China

- · Course project for *Design Thinking*, best design in that course;
- · In a group of 5, our team was concerned about the safety of the elderly when taking a bath;
- · Designed a bathtub in which people cannot slip.

**iGEM**Nov 2015 - Jul 2016
Team member
Shanghai, China

- · Group of 16, Silver Metal, focused on intestinal disease;
- · Finished the web page and poster.

## TEACHING EXPERIENCE

CS110: Computer Architecture I	2018 Spring Semester
Leading Teaching Assistant	ShanghaiTech
SI100C: Introduction to Computer Science	2017 Fall Semester
Leading Teaching Assistant	ShanghaiTech
SI100: Introduction to Information Science and Technology	2017 Spring Semester
Teaching Assistant	ShanghaiTech
CS100: Introduction to Programming	2016 Fall Semester
Teaching Assistant	ShanghaiTech

### **AWARDS**

ShanghaiTech President's Scholarship	Nov 2016
Shanghai Scholarship	Oct 2016

## TECHNICAL STRENGTHS

Languages Chinese, English(frequent user)

Computer Languages Rust, Java, C++, C, Python, MATLAB Protocols & APIs LLVM, Android, boost, ROS, numpy