

# Chenyang Zhu

Tel: (+86)18057881020 | Email: vitozcy@zju.edu.cn

Cainiao Yizhan, Yuquan Campus, Zhejiang University, No.38 Zheda Road, Xihu District, Hangzhou City, China

## EDUCATION

---

### ZHEJIANG UNIVERISTY

#### *Bachelor of Computer Science and Technology*

Hangzhou, China  
Sep 2020 – present

- **Academic:** Overall GPA 3.90/4.0 (88.63/100)
- **English Proficiency:** Toefl 104
- **Honor:**
  - Zhejiang Provincial Government Scholarship
  - Outstanding Student of Zhejiang University
- **Research Interests:**
  - IoT Security, Cloud Native Security, Software Security, Network Security

## RESEARCH EXPERIENCE

---

### **Get to know whether the vulnerable package in your supply chain is dangerous at low cost**

Hangzhou, China

*Zhejiang University, Supervisor: Dr. Wenbo Shen*

*Aug 2022 – present*

- Running a large-scale static analysis of downstream modules which depend on vulnerable packages to reveal the fact that using package level dependency analysis to determine whether the supply chain is affected or not will cause high false positive rate
- Currently proposing a method to describe module to realize cross-module analysis with low cost
- Provide open source databases derived from large-scale analysis to facilitate future research

## PROJECTS

---

### **Detect Vulnerability in Google Blockly Code Generator**

Hangzhou, China

*Project of Student Research Train Program*

*Apr 2022 – present*

- Improved the solidity code generator for *Google Blockly*, enabling it to dynamically store key syntax information
- Summarized the characteristics of some classic vulnerabilities, and developed a tool to automatically detect them based on that syntax information. Currently working on improving it

### **Single-User Compact Database Engine**

Hangzhou, China

*Coursework of Database System*

*May 2022*

- Designed and implemented a singer-user database engine which includes five modules: disk and buffer pool manager, catalog manager, record manager, index manager, executor engine and SQL parser. User can enter SQL language through CLI
- The engine supports basic CRUD operations, three data types (int, float, char), multiple tables and multiple databases
- Accelerated searching based on automatically built B+ tree index on primary key

### **Dynamically Scheduled Risc-V CPU Design**

Hangzhou, China

*Coursework of Computer Architecture*

*Dec 2022*

- Using Verilog to design Pipelined CPU with IF/IS/RO/FU/WB stages which supports multicycle operations
- Designed dynamically scheduled pipeline with Scoreboard
- Designed different function units with state machine

## SKILLS

---

- Programming Language: C/C++, Python, Verilog, X86 & Risc-V Assembly Language, SQL