

Jerry (Yuan) Zhou

ABOUT

I'm interested in the underlying structures and low level applications of computing machines, particularly Operating Systems, Instruction Set Architectures, Integrated Circuits, Networking, and Computer Security. I'm also able to develop high-quality user applications, be it native apps or websites.

PERSONAL INFO

PHONE

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E-MAIL

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GITHUB

<https://github.com/yvbrjdr>

<https://github.com/GreaterFire>

LINKEDIN

<https://yvb.moe/in>

AWARDS

REGIONAL SECOND PLACE

DIVISION II, ACM-ICPC

2019

SITE FIRST PLACE

DIVISION II, ACM-ICPC

2017

FIRST PRIZE

NATIONAL OLYMPIAD OF
INFORMATICS IN PROVINCE,
CHINA COMPUTER FEDERATION

2014

SKILLS

- Linux
- Docker
- Kubernetes
- C/C++/Golang
- Java/Python/TypeScript
- SQL
- CI/CD
- Release Engineering
- Complicated System Design
- Network Protocol Design
- Computer Graphics and Parallelization
- Digital Signal Processing

EDUCATION

UNDERGRADUATE | UNIVERSITY OF CALIFORNIA, BERKELEY

Aug 2017 - Present | Berkeley, CA | B.A. Computer Science

Exp. Graduation: May 2020 | GPA: 3.846 | Major GPA: 3.974

Relevant Coursework:

CS 152 : Computer Architecture | CS 162 : Operating Systems

EECS 151 : Digital Design and IC | CS 161 : Computer Security

CS 184 : Computer Graphics (A+) | CS 168 : Computer Network

CS 182 : Deep Neural Networks | CS 188 : Artificial Intelligence (A+)

CS 186 : Databases (A+) | CS 170 : Algorithms (A+) | CS 70 : Discrete Math (A+)

CS 61C : Machine Structures (A+) | CS 61B : Data Structures (A+)

EXPERIENCE

SOFTWARE ENGINEERING INTERN | KELDA INC

Jun 2019 - Aug 2019 | Berkeley, CA

- Built a scalable application in Golang that makes development in Kubernetes clusters easier for microservice developers (30k+ lines of code).
- Designed and engineered a feature that makes it easy to live update Docker images in the cluster.
- Created a framework that automatically provisions and destroys Kubernetes clusters on Google Compute Engine for the integration tests of the product.

UNDERGRADUATE RESEARCH ASSISTANT | BERKELEY NETSYS LAB

Feb 2019 - Oct 2019 | Berkeley, CA | Professor Scott Shenker

- Gathered metrics about the overhead of the Linux thread scheduler.
- Explored potential ways to optimize chained packet-based software.

SELECTED PROJECTS

TROJAN-GFW

<https://github.com/trojan-gfw/trojan>

Oct 2017 - Present | C++

- A fast and lightweight obfs web proxy aiming at penetrating DPI (Deep Packet Inspection) firewalls.
- Features anti active and passive protocol detection.
- Received **7k+ stars** on GitHub, has thousands of users, and gained its entrance into major Linux distributions, such as Debian and Arch Linux.

RISC-V PROCESSOR

<https://ucb.yvb.moe/Fall 2019/EECS 151/report.pdf>

Oct 2019 - Dec 2019 | Verilog

- A functioning 3-stage RV32I core with a CPI of 1 running at 75 MHz on a Zynq-7000 Xilinx FPGA.
- Features BIOS, loadable user programs, ability to communicate with a host computer via UART, memory-mapped user I/O, and a memory-mapped subtractive synthesizer.

RELATIVISTIC RAY TRACER

<https://yvb.moe/relativistic-ray-tracer/>

Apr 2019 - May 2019 | C++

- A progressive path tracer that can simulate bending of light caused by massive objects due to general relativity.
- Features wide spectrum and Doppler Redshift.
- Invited to present to the EECS department.