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
(510) 761-4040

E-mail
yvbbrjdr@berkeley.edu

GitHub
https://github.com/yvbbrjdr
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 - May 2020 | Berkeley, CA | B.A. Computer Science
GPA: 3.854 | Major GPA: 3.976 | Major Upper Div. GPA: 4.000
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 **(A+)**
CS 182 : Deep Neural Networks | **CS 188** : Artificial Intelligence **(A+)**
CS 186 : Databases **(A+)** | **CS 170** : Algorithms **(A+)**

EXPERIENCE

SYSTEM SOFTWARE ENGINEER | NVIDIA Corporation
Jun 2020 - Present | Santa Clara, CA
- Developed firmware for the RISC-V microcontrollers inside the GPU.
- Maintained the kernel-mode driver for the GPU.

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.

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 **15k+ 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.