

# Yicheng Liu

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[Home](#)

[Github](#)

## Education

### Shanghai Jiao Tong University

Undergraduate, 2020 - Present  
GPA in first three years: 90.70 / 100  
Rank in first three years: 1 / 59

## Experience

### University of Michigan

Summer research in OrderLab  
Advisor: Prof. Ryan Huang  
Mentor: Yigong Hu  
Project: Cancellation in distributed system

### Shanghai Jiao Tong University

Intern in Institution of Paralled And Distributed System  
Advisor: Prof. Jinyu Gu and Prof. Haibo Chen  
Project: Autopilot system based on ROS2  
Project: Kernel address sanitizer in microkernel OS  
Project: OS syscall acceleration

### Shanghai Jiao Tong University

Intern in John Hopcroft Center  
Advisor: Prof. Guanjie Zheng  
Project: Traffic simulation system aiming for large scale flow  
Project: Offline reinforcement learning algorithms for traffic signal control

### Shanghai Jiao Tong University

PRP project participant in Intelligent Computer Architecture Technology  
Mentor: Zefang Yu  
Project: Automatic image dataset collecting through 3D engine

## Publications

### Synpose : Large-Scale and Densely Annotated Synthetic Dataset for Human Pose Estimation in Classroom

Zefang Yu; YangCheng Li; **Yicheng Liu**; Ting Liu; Yuzhuo Fu  
ICASSP, 2022. [Paper](#) [Blog](#)

### CBLab: Supporting the Training of Large-scale Traffic Control Policies with Scalable Traffic Simulation

Chumeng Liang; Zherui Huang; **Yicheng Liu**; Zhanyu Liu; Guanjie Zheng;  
Hanyuan Shi; Yuhao Du; Fuliang Li; Zhenhui Li  
SIGKDD, 2023. [Paper](#) [Doc](#) [Code](#)

## Honors

**The Second Prize Scholarship**, Shanghai Jiao Tong University 2023  
**Guobin Scholarship**, Shanghai Jiao Tong University 2023  
**Excellent League Member**, Shanghai Jiao Tong University 2023  
**National Scholarship**, Ministry of Education of China 2022  
**The First Prize Scholarship**, Shanghai Jiao Tong University 2022  
**Merit Student**, Shanghai Jiao Tong University 2022  
**The Third Prize Scholarship**, Shanghai Jiao Tong University 2021

## Interest

Make system secure and reliable  
Make secure and reliable system faster  
AI 4 SYS

## Skills

### C/C++

ChCore, a microkernel OS (Contributor) [Code](#)  
ParaBox CLI, a CLI version of game ParaBox [Code](#)  
CBData, a fast tool for traffic trajectory match and generate [Code](#)

### Java

Cancellation project (Contributor), Unavailable yet

### Rust

A single executable of UNIX tools combination, Unavailable yet

### Python

Synpose, an automatic image dataset collector (Contributor) [Blog](#)  
Traffic signal control through reinforcement learning, Unavailable yet