# Meilin Zhu

# EDUCATION

Institute of Software, Chinese Academy of Sciences (Univ. of CAS)

July 2023 - June 2029(est.)

Ph.D. Software Engineering
Tsinghua University

Current GPA: 3.88/4.0 July 2019 - June 2023

B.Eng. Computer Science and Technology

GPA: 3.73/4.0

Jilin City No.1 High School

July 2016 - June 2019

No.11 of students in Jilin Province in National College Entrance Examination

### SKILLS

 $\textbf{Languages:} \ \ Python, \ C/C++, \ Cython, \ Rust, \ Java/Kotlin, \ JavaScript, \ TypeScript, \ Go, \ HTML, \ JSON, \ CSS, \ Ruby, \ L^{\!A}T_{\!E}X$ 

**Frameworks**: Pytorch, Node.js, React Native, Bootstrap, Ruby on Rails, Django **Tools**: Linux(Configuring and Managing), Git, Docker, LaTeX, Slurm, Postman

# SELECTED PROJECTS

**ISS** | Autonomous Driving Platform

Jan. 2023(Under Development)

- Modular framework with the aim to build an extensible workspace tailored to research
- Contain both traditional and deep learning algorithms for self-driving related tasks
- Design modulars with minimal dependency on external libraries, providing clean workspaces for researchers

\*\*\* Net Access | Network Service Provisioning Module

Aug. 2021

- Cooperated with \*\*\* Co., Ltd, developed its network service provisioning and access module used for routers
- System with complete frontend and backend
- Implemented functions: User Management, Ticket Lifespan, Online Appointment, etc.

Naive Ray Tracer | C++ Ray Tracing Engine

May 2021

- Implemented basic PT(Path Tracing) and SPPM(Stochastic Progressive Photon Mapping) algorithm
- Speed up intersection process by KD-Tree pre-processing
- Implemented Bezier & B-spline Curve Intersection algorithms based on Newton-Raphson Method
- Implemented extra features including textures, focus depth and anti-aliasing

#### EXPERIENCE

## Institute of Software, Chinese Academy of Sciences | Research Intern

Oct. 2022 – June 2023

- Designed modular structure of ISS platform
- Implemented data exchange layer and majority part of perception layer of ISS
- Participated in adversarial attack on NeRF and its downstream applications

AISpeech Inc. | Developing Engineer Intern

June 2022 – Sept. 2022

- Improved end-to-end keyword spotting & recognition system, data alignment, conducting baseline experiments
- Speed up model training and deployment by optimizing network structure and downsizing neural network scale

### CoAl Group, Tsinghua University | Research Intern

Oct. 2020 - Apr. 2022

• Participated in fine-tuning LLMs and data cleaning & scaling