Chang Liu

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EDUCATION

Peking University, *Master of Software Engineering* 2022.09-2025.07

Tsinghua University, *Bachelor of Computer Science and Technology* 2018.09-2022.07

SKILLS

- Programming languages: C++, Python, Go, Java
- Others: Linux, MySQL, Git, Django, Docker, PyTorch, Latex

WORKING EXPERIENCES

PKU-Agibot Lab 2023.07-2024.03

Research Assistant *Beijing*

- Conducted research on the grasping of a two-fingered robotic arm. In my work, I utilize an RGB camera for 3D reconstruction of the environment and employ a general grasping algorithm for object manipulation. The paper has been submitted to RA-L (IEEE Robotics and Automation Letters) and is currently in the second round of review. You can find the paper at the following link: https://arxiv.org/abs/2311.16592.

RealAI 2021.11-2022.11

Research Intern, AI Security Department *Beijing*

- Proposes a new method of adversarial attack against face recognition networks. It works in 3D latent space of the victim's face and achieves promising results, both on some commonly-used public face recognition backbones and on some commercial digital products. You can find the CVPR2023 paper at the following link: https://arxiv.org/abs/2303.15818.

ByteDance AI Lab 2021.06-2022.10

Summer Intern, Speech and Audio Department *Beijing*

- Developed features of intelligent recommendation and input association for ByteBot, which provided intelligent customer services of Douyin app.
- Ported an embedding matching engine, ScaNN, to ByteDance's platform. Since the internal toolchain is different from Google's official toolchain, I rewrote all the build rules of ScaNN and solved a series of dependency issues.

PROJECTS

Open Source Promotion Plan (OSPP) 2022.07-2022.09

I was responsible for Jina AI's project: 3D point cloud's representation learning based on deep learning. The project integrated some mainstream 3D point cloud classification models for *Jina Finetuner* library and provided them to users as a standalone *Jina Executor*. I also uploaded some pre-trained models for users to finetune. It was now applied to an internal project in Jina AI, the link is: https://cloud.jina.ai/executor/1mfkv18z

Simple TCP Server 2022.06

I implemented basic TCP protocol on the server side, including generating sequence numbers for packets, establishing the connection, sending and receiving data segments, closing the connection, retransmission on timeout, packet reordering, and congestion control.

MISCELLANEOUS

China Collegiate Programming Contest (CCPC) for Girls, *Silver Medal* 2021.10

Mathematical Contest In Modeling, *Finalist Award* 2021.04

Blue Bridge Cup C/C++ Programming Contest, Beijing, *Second Prize* 2021.04