Sitao (Charlie) Tong

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EDUCATION

The Ohio State University, Columbus, Ohio **Aug 2021- Dec 2023(Expected)**
B.S in Computer Science and Engineering (Transfer); GPA 3.85/4.0

- *Software 2 Teaching Assistant (AU22), Dean's List (3 Semesters)*

Zhejiang University of Technology, Hangzhou, China **Sep 2018 - Sep 2021**
B.S in Software Engineering; GPA 86/100
Courses: Operating System, Computer Networks, AI, Algorithms and Data Structure …Transcript Link

SKILLS

- Programming Languages: Java, Python, Ruby, C++/C, SQL, MatLab, HTML, JavaScript
- Frameworks/Platform: SpringMVC, Pytorch, Git, Maven, Linux, AWS

EXPERIENCE

Zhejiang University of Technology, Computer Vision Lab
(Personal) Fine-Grinded Sketch Based Image Retrival System with ViT Hangzhou, China
Research Assistant (Instructor: Cong Bai) Nov 2020 - Jun 2021

- Developed an AI system which user draw a sketch on portable device and retrieve the similar image of the same category. System can collect the query history to expand the existing dataset.
- Improved a Siamese Neural Network with Triplet Loss based on Vision Transformer (**ViT**); the top1 accurracy increase by 4% compared to traditional method.
- Implemented the AI system with **Pytorch;** developed the server with **Flask.**

PROJECTS

Location Based Campus Activity System Jan 2021-Feb 2021
(Group of 4) Leader | Database Design, Backend;

- Developed a web application that manage the activity on campus; the Participant search activity according to period and location on map, check in and check out, leave a comment online; the organizer can upload activity information; the mentor can approve the application in group online;
- Implemented the web based on **SSM** (Spring+SpringMVC+Mybatis); Deployed the database on **AWS**; stored image data in **AliyunOSS**. The group collaborated with **GitHub**.

(Individual) Earthquake SOS Car July 2020-Aug 2020

- Developed an SOS car system which can make its way out of a dangerous place, cry for help, recognize rescue team and lead the them back to the spot.
- Deployed on Raspberry Pi 3 under **Linux (Ubantu)** developed the motor control, routing and face detection with **Python**.
- Recognized rescue team with face detection, implemented with cascade classifier with **OpenCV**.

(Individual) A Local Full-text Search Engine Sep 2019-Jan 2020

- Developed a local full-text search engine with **Java**, implemented full-text search based on **Lucene** library, with various filter options and higlight the keywords in content preview window.