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 — GPA 3.88/4.0
Zhejiang University of Technology, Hangzhou, China — **Sep 2018 - Aug 2021**
B.S in Software Engineering *(Transfer Out)* — GPA 86/100

SKILL & Courses

Courses: Operating System, Computer Networks, AI, Algorithms, Data Structure …Full Transcript Link

- Programming Languages: Java, Python, C++/C/C#, Ruby, Rust, SQL, MatLab, JavaScript
- Frameworks/Platform: React, SpringMVC, Pytorch, Numpy, Rails, Git, Maven, Linux, AWS

EXPERIENCE

Virtual Hybrid Inc. - Pawstopia, a pet social network platform — Chino Hills, California
Full Stack Developer Intern — Jun 2023 – Aug 2023(Expected)

- Engineered a news feed backend utilizing **C# .NET**, deployed on the **Azure**. Employed **PostgreSQL** as the database and embraced **Docker** for enhanced database portability and maintenance.
- Designed and implemented a **Restful** API for seamless communication between front and the server.
- Utilized **Redux** along with **React hooks** to enhance performance in the front-end development to streamline API communication, resulting in 3x improvement in page loading time.

ZJUT Computer Vision Lab - FG Sketch Based Image Retrival System with ViT — Hangzhou, China
Research Assistant (Instructor: Cong Bai) [Github] — Nov 2020 - Jun 2021

- Improved the algorithm by applying **Vision Transformer**(ViT) layer to the branches of **Siamese Neural Network**. Implemented and trained the enhanced model using **PyTorch** on GPU of cloud server. The top1 accurracy improved by 4% compared to the conventional approach.
- Built an AI web app enabling users to sketch and retrieve matched shoe products based on **Flask.**

PROJECTS

ML-based Review Sentiment Prediction [Github] | Python — Aug 2022 - Dec 2022

- Developed a machine learning prediction system using **Numpy** and **Sklearn**.
- Transformed data into a Bag of Words(**BOW**) representation; Applied tf-idf ranking to clean features. Improve the training time by 10%. Evaluated its running time and accuracy using **Matplotlib**.

Space Invader Game [Github] | C — Jan 2022 - Mar 2022

- Developed the Space Invader game with simulation timer and physical bouncing and hitting effects.
- Utilized a linked list with garbage collection and reference counting to efficiently store enemy information, mitigating a 25% risk of memory leakage in cases of unsuccessful memory allocation.

Location Based Campus Event System [Github] | Java + Spring — Jan 2021 - Feb 2021
(Group of 4) Leader | Database Design, Backend;

- Created a web application for campus activity management, enabling location based search, check-in/out, comment, information upload, and online approval.
- Implemented the web based on **SSM** (Spring+SpringMVC+Mybatis); Deployed the **MySql** database on **AWS**; stored image data in **AliyunOSS**. Group cooperate and control version with **GitHub**.

HONOR & PRIZE

- *Dean's List (4/4 Semester)*
- *CSE2231 Teaching Assistant*
- *Founder & President of Slash Coding Club*
- *2016 First Tech Challenge, Leader of Champion in China*