Yiran Su

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6805 Wood Hollow Dr Austin, TX

EDUCATION

• The University of Texas at Austin

M.S. in Engineering, Software Engineering and System major, GPA: 3.73/4

Austin, TX, USA Aug. 2019 - May. 2021

• Sun Yat-sen University, School of Data and Computer Science

B.E. in Network Engineering, top 10% in the class.

Guangzhou, China Aug. 2015 - Jun. 2019

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o Course Highlights Data Structure & Algorithms, Operating System, Computer Network, Web Programming

SKILLS

Programming Language C++, Python, Java, SQL, HTML, CSS, JavaScript, Kotlin, Shell, GoLang Framework and Tools React Native, Flask, PyTorch, Tensorflow, Docker, MongoDB, Kubernetes

Intern Experience

• Coherent Logix Inc.

Software Dev Intern, May. 2020 - Aug. 2020, Austin, USA

- Worked on **neural network quantization**, which simplifies the original neural network model, and persists the original model precision.
- Accomplished 16/8/4-bit Quantization Aware Training (QAT) with Tensorflow 2 (Python).
- Developed a set of **QAT generation & validation APIs** in **TensorFlow 2** (**Python**) to simplify future applications.

• Tencent Inc.

Software Dev Intern, Sept. 2018 - Mar. 2019, Shenzhen, China

- Focused on a pattern-based natural language parsing framework in **Python** for a task-oriented chatbot.
- Deployed the parsing framework on a **Tornado** (Python) Server. The framework was able to handle **100k**+ user vocal requests per day, with a **27**% latency drop.
- Created an **automatic** log analyzer in **Python** to evaluate user behavior (customer stickiness, feature performance, etc.)

• Graduate Teaching Assistant

EE 422C (Java), UT-Austin, Jan. 2020 - May. 2020

• Led weekly lectures on Java, including polymorphism, Java generic, multithreading, lambda, stream, etc.

Project Experience

• Share Your Review

Course project for EE 382V at UT-Austin, Sept 2019 - Dec 2019

- Worked on a full stack project that requires both frontend (web/Andriod/ReactNative) and backend (response framework /database) implementation. The project goal was to help people to connect with nearby book readers.
- o Designed a MVC-styled Flask & Flask-RESTful (Python) backend. Firebase and PyMongo for database.
- Accomplished a web frontend with HTML/CSS/Bootstrap and embedded it into the Flask-RESTful backend.
- Applied Kotlin for the Android frontend. Designed a reusable cardview template for the team. Utilized Volley to handle requests. Kotlin's Camera & Location APIs were applied.
- o Implemented a React Native (JavaScript) frontend, with Camera, location, sharing and notification features.

• Sun Yat-sen University Club Information Platform

Mar 2018 - Jun 2018

- Designed the app to spread club event information across campus. Contributed as a frontend developer.
- Constructed the **Android** frontend in **Java**, with **Retrofit2** & **RxJava** applied. Designed the Web frontend in **HTML/CSS/JavaScript**.

• 2018 International Aerial Robotics Competition

Computer Vision, Sept 2017 - Aug 2018

• For ground object detection, designed an **OpenCV**-based Support Vector Machine (SVM) classifier, with a self-implemented Histogram of Oriented Gradient (HOG) descriptor in **C++**.

• Distributed System Design

MIT 6.824 online open course, Sept 2020 - present

• Implementing MapReduce and Raft in Go to utilize distributed processing.

Publications

Manor, L., Su, Y., et al. "What is FAFSA? Interpreting non-technical jargon in domain-specific text", COLING 2020, submitted.

 Proved the computational linguistic association between jargons and the corresponding context with PyTorch (Python). BERT embeddings applied.