Yiran Su

6805 Wood Hollow Dr
♢ yiransucdr@gmail.com ♢ LinkedIn account ♢ (512)-999-5939 Austin, TX

Education

- **University of Texas at Austin** Austin, TX, USA
  M.S. *in Engineering,* ***Software Engineering & System*** *track, ECE Dept.* ***GPA****: 3.73* *Aug. 2019 - May. 2021*
- **Sun Yat-sen University, School of Data and Computer Science** Guangzhou, China
  B.E. *in Network Engineering* ***Overall GPA****: 3.85/5.00,* ***Junior GPA****: 4.25/5.00* *Aug. 2015 - Jun. 2019*
  Course Highlights*: C++ programming, Data Structure and Algorithms,*
  Operating System, Computer Network, Web Programming, Mobile Internet Programming Project

SKILLS

Programming Language C++, Python, Java, HTML5, CSS, JavaScript, Kotlin, Shell, SQL
Framework and Tools React Native, Flask, PyTorch, Tensorflow, Docker, MongoDB, Kubernetes

Intern Experience

- **Coherent Logix Inc.** Austin, USA
  Video, CV and Deep Learning Group *May. 2020 - Aug. 2020*
  - Explored **nerual network quantization** topics that convert a floating-point nerual network to an integer-based nerual network, in order to lower required calculation resource.
  - Applied **16 bits** Quantization Aware Training (**QAT**) and Post-training Quantization (**PQ**) for ResNet, SqueezeNet and MobileNet with **Tensorflow 2** (In progress).
- **Tencent Inc.** Shenzhen, China
  Perceptual Intelligence Group *Sept. 2018 - Mar. 2019*
  - Developed a **pattern-based natural language parsing framework** in **Python** for a task-oriented Arena of Valor **chatbot** "Lu Bu (Lv, Bu)", while **reducing** the average latency by **27%** to **less than 90 ms**.
  - Deployed the above framework on a **Tornado** Server, which handled more than **100k related requests** per day.
  - Designed an **automatic** user log analyzer (**Python**) for the chatbot which is able to evaluate high-frequency request, customer stickiness and new feature performance.
- **Graduate Teaching Assistant** Austin, USA
  *EE 422C Software Design and Implementation (****Java****) II* *Jan. 2020 - May. 2020*

Project Experience

- **Share Your Review** Austin, TX
  Course project for EE 382V: Advanced Programming Tools at University of Texas at Austin *Sept 2019 - Dec 2019*
  - Participated this **full stack** project which allows users to post their book reviews and share to other apps. Users can create their own account, post book reviews, read reviews from others, subscribe certain categories and get corresponding update notifications.
  - Designed a **MongoDB** database with **PyMongo** as our project database. Carried out **unit testing** for all APIs.
  - Developed an **MVC** backend with **Flask** & **Flask-RESTful**. Used **Firebase Storage** to store uploaded photos.
  - Accomplished **web** frontend with **HTML/CSS/Bootstrap** and embedded it into our Flask-RESTful backend.
  - Applied **Kotlin** in our **Android** frontend. Designed a **reusable cardview template** as a public method for other team members. Utilized **Camera API** and **Location API** to provide our users with diverse uploading choices. Used **Volley** to handle review creation request.
  - Implemented the **React Native** frontend with **Expo**. Beside of the points mentioned in the Android part, we enabled **notification** and **sharing** based on Expo components.
- **Consistency Regularization (CR) in Natural Language Processing** Austin, TX
  Research project for LIN 393: Computational Linguistic at University of Texas at Austin *Sept 2019 - Dec 2019*
  - Embeded the semi-supervised learning concept **consistency regularization** into supervised learning NLP tasks, in order to make the supervised model **more robust to it's predictions**.

- Implemented the new **TextCNN-CR** model with **PyTorch**. Scored **77.06%** in accuracy on MR (Movie Review Data) binary classification dataset, compared with the 75.33% accuracy of original TextCNN model.

- **International Aerial Robotics Competition** Guangzhou & Beijing, China
  ***Innovative Design Award**, Computer Vision Group member* *Sept. 2017 - Aug. 2018*
  - Designed an object **detection** and **location** system for an aerial robot.
  - Constructed an **SVM** ground robot detector in **C++** for our system by writing a **self-implemented** Histogram of Oriented Gradient descriptor (**HOG descriptor**) and applying **OpenCV**'s related packages.