

HANCHI ZHANG

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🎓 EDUCATION

University of Michigan, Ann Arbor, MI
B.S.E. in Computer Science & Data Science

Expected May 2021
GPA 3.75/4.00

👤 EXPERIENCE

University of Michigan Systems Lab Ann Arbor, MI

Apr. 2019 - Present

Research Assistant, advised by Prof. Michael Cafarella Python / pytorch

- Implemented a video database that improves querying time of the user given model by 7 times with 93% accuracy by constructing and choosing from 1.3 million cascades composing of 360 smaller classifiers
- Shifted metric from accuracy to precision to eliminate 40% of false positives produced by original method
- Processed 4GB of highly noisy csv files to train and fine-tune multiple LSTM classifiers that achieved 75% near accuracy and average absolute error of 6 dollars per 225,000 product

Chemical Engineering at University of Michigan Ann Arbor, MI

Apr. 2019 – Present

Websites Manager HTML / CSS / javascript / React

- Rewrote components of the websites to convert pure HTML to React components improving reusability
- Refactored code to separate contents from styling by storing texts in local json file serving as a backend

Checkout the websites [here](#) and [here](#)

Perch Research Ann Arbor, MI

Dec. 2018 – Present

Frontend Developer HTML / CSS / javascript / React

- Developed platform responsive frontend pages and components using libraries including emotion.sh
- Adapted to React Hooks API to restructure components declared as classes to functions with useState / useEffect to eliminate unnecessary code structure and achieve better code readability and reusability
- Utilized Redux to keep track of complex state changes in components such as a search page

Beijing Xiaomi Technology

Jun. 2018 – Aug. 2018

Software Development Intern Python / Java

- Developed an Android app demo providing intelligent sketch of MIUI users' daily behaviors e.g. app usage
- Set up a simulated server to communicate dummy data with the app using Python and flask
- Optimized the hyperparameters of a deep neural network of the ad system and increased the AUC by 1%
- Implemented more complex neural network structures such as RNN/W&D and tested their performance

⚙️ SKILLS

- Programming Languages: C++, C, Python, HTML, CSS, javascript, Java, SQL, \LaTeX , Swift (Limited)
- Tools & Framework: Git, Bash, PyTorch, React, Node.js, jQuery

🔑 PROJECTS

U of M Blue Bus Time Checker Python / pyQuery / AWS

Feb. 2019

- Developed a fully-deployable / demo-able Alexa skill that informs user the time of the next bus the user can catch and the time to walk to the closest bus station utilizing Google Matrix APIs
- Utilized a python library Chalice to develop a backend API and deployed to AWS Lambda

Multithreaded Library / Disk Scheduler C++

Jan. 2019 – Feb. 2019

- Implemented a thread library utilizing linux system infrastructures including ucontext.h that supports multithreading across multiple simulated CPU cores including interface for mutex and condition queue
- Implemented a disk scheduler program that reads a series of input representing the track number of disk requests that will be executed synchronously by a disk servicer