Fangzhou XIE

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EDUCATION

Carnegie Mellon University, Pittsburgh, U.S.A Sept. 2019- Dec. 2020 (expected)

- Master of Information Technology Strategy
- **Cumulative QPA: 3.87/4.33**
- Courses include Intro to Computer System, Distributed System, Parallel Computer Architecture and Programing, Intro to Machine Learning, Machine Learning on Large Dataset, DevOps

East China University of Science and Technology, Shanghai, P.R. China Sept. 2015- June 2019

- B.E. in Computer Science and Technology
- **Overall GPA: 3.58/4.0; Major GPA: 3.77/4.0; Ranked top 2 in class**
- Recognized for Outstanding Graduate of Shanghai (Province/State level award)
- Recognized for Outstanding Student 2015- 2016
- Recognized for Outstanding Student Leader 2016- 2018
- Awarded School Scholarship 2015- 2019

Fudan University, School of Economics, Shanghai, P.R. China Sept. 2016- June 2018

- Minored in International Economics and Trade and received a graduation certificate
- Courses include Microeconomics, Macroeconomics, Principles of Investment, International Finance and Accounting

PROJECT EXPERIENCE

Project Viralnews May 2020- present

- Trained several machine learning models (logistic regression, KNN, decision tree, and RNN) using Python and PyTorch to **detect sentence-level political ideology** (liberal or conservative), achieving a best accuracy of 65%
- Implemented a backend server using Python and Flask, and deployed the server on AWS EC2 using Gunicorn and Nginx

Parallel Johnson's Algorithm Apr. 2020- May 2020

- Implemented Johnson's algorithm for all-pairs shortest path from scratch in C++
- Parallelized Johnson's algorithm using OpenMP and CUDA, achieving **6.97x speedup for OpenMP** (on two six-core Xeon e5-2620 v3 processors) and **16.37x speedup for CUDA** (on a NVIDIA GeForce RTX 2080 B GPU)

WORKING EXPERIENCE

Skyview Fund | Shanghai, P.R. China | Python Engineer Intern May 2019- July 2019

- Implemented Python scripts using Scrapy to **automate web crawling**
- Utilized Redis to store crawled raw data and MongoDB to store processed data in order to balance the gap between the speed of crawling and processing

RESEARCH EXPERIENCE

Blind Navigation Project | Brown University, U.S.A | Research Assistant July 2018- Oct. 2018

Sponsor: Benjamin Kimia, Professor at School of Engineering, Brown University

- Researched papers related to image localization
- Implemented algorithm in C++ to determine whether two images are taken at the same location
- Designed mathematical model and implemented algorithm in C++ to **estimate horizontal rotation angle** between two images obtained at the same location
- Implemented Vector of Locally Aggregated Descriptors (VLAD) to improve image retrieving accuracy

LEADERSHIP AND ACTIVITIES

Master of Software Engineering Leadership Initiative | Carnegie Mellon University, U.S.A Oct. 2019- present

- Organized several events for students with different cultural backgrounds to celebrate various traditional festivals from around the world

Class Manager | East China University of Science and Technology, P.R. China Mar. 2016- Oct. 2018

- Assisted the student counselor and the dean's office with student affairs
- Chaired several meetings to enhance communication between faculty and students

OTHER

- Interested in backend development, machine learning, parallel programming and eager to discover and learn new things
- Currently working on **a medium-to-low frequency quant trading side project** focused on hedging digital currency contracts using vnpy (an open source framework in Python for quant trading)