Ge Huang

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EDUCATION

CARNEGIE MELLON UNIVERSITY | M.S. in Computational Data Science (Systems Concentration)
May 2021 - Present
Expected Graduation Date: December 2022
GPA: 4.0/4.0

SHANGHAI JIAO TONG UNIVERSITY | B.S. in Computer Science
September 2016 - July 2020
GPA: 91.42/100

UNIVERSITY OF CALIFORNIA, BERKELEY | Semester Exchange Student
August 2019 - December 2019
GPA: 4.0/4.0

EXPERIENCE

BYTEDANCE | Research and Development Intern
September 2020 - April 2021 | Beijing, China
Designed and implemented calculation of domain authority, a ranking score used by search engine.

- Designed feature extraction from social media user data. Built a model to calculate authority scores of social media content publishers. Deployed the model on the Hadoop cluster as a cron job that processed daily updated user data.
- Created a large dataset with automatic sample generation and pseudo labeling. Built a model to calculate authority scores of websites.
- My implementation of authority score calculation was deployed to search engine, and achieved a 3% performance improvement.

AKUNA CAPITAL | Software Engineer Intern
May 2020 - August 2020 | Shanghai, China
Built a low-latency exchange simulation framework for back-testing of high frequency trading strategies.

- Designed and developed a concurrent web application that visualized the real-time internal status and incoming/outgoing message streams of the exchange simulation framework.
- Implemented communication between the web application written in Python and the exchange simulation framework written in C++.
- Implemented a mock trade interface that allowed traders to submit artificial orders or change historical orders in the exchange simulation framework to test trading strategies.
- Implemented a generic architecture for simulation of latency. Added support for a variety of exchange messaging protocols based on the generic architecture.

PROJECTS

BUSTUB | CMU Database Systems individual project (C++)
August, 2021
Built a relational database management system.

- Implemented a buffer pool that caches table and index data using LRU policy.
- Implemented index retrieval using B+ tree data structure.
- Designed a lock manager that performs transaction concurrency control and deadlock detection.

DISTRIBUTED BITCOIN MINER | CMU Distributed Systems group project (Go)
August, 2021
Built a distributed system for bitcoin mining.

- Designed and implemented a reliable communication protocol on top of UDP.
- Implemented a distributed system based on the communication protocol, including load balancing and failure recovering.

SKILLS

Over 5000 lines • C++ • C • Java • Python **Over 1000 lines** • Go • JavaScript • MATLAB • MySQL • HTML • CSS
Tools • Hadoop • PyTorch • TensorFlow • Docker • Git