RUI CHEN

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EDUCATION

Expected in May 2022
Bachelor of Arts: Computer Science and Applied Mathematics
University of California, Berkeley | Berkeley, CA
- Cumulative GPA 3.9

RELEVANT COURSE WORK

- ***CS Courses***: **Algorithms**, **Operating Systems**, **Databases**, **Machine Learning**, Data Structures, Computer Architecture, Structure and Interpretation of Computer Programs
- ***Other Courses***: **Probability Theory (A+)**, **Linear Algebra (A+)**, **Math Analysis (IP)**

ACCOMPLISHMENTS

- 2020 Citadel Terminal Competition School's First Place
- 2017 Waterloo University Euclid Math Contest Global Top 0.1%, School 1st Place
- 2017 American Physics Bowl Global Top 50, 0.01%, School 1st Place

WORK HISTORY

Jun 2020 - Aug 2020
Machine Learning Intern
Cambricon - Remote

- Collaborated with team members to reproduce the Computer Vision paper "*EfficientDet: Scalable and Efficient Object Detection*"
- Developed computer vision solution for breast disease detection and prediction, achieving 89.7% accuracy, outperforming human experts.

Aug 2019 - Current
Software Developer
UC Berkeley Energy and Resource Department - Berkeley, CA

- Worked with a team of four, designed & implement a carbon emission prediction model for the California Department of Transportation
- Designed & implemented data pipeline for 180 million entries of transportation data

NOTABLE PROJECTS

Streaming Data Surveillance & Alert Module (Java):
- Implemented the event-alarm functionality for a Time series database
- Supported options for tracking and recording for arbitrary pieces of data, static/dynamic data filtering

Traveling Purchaser Problem (TPP) Optimizer (Python): https://github.com/ziyaointl/CS170-Traveling-Rao
- Implemented heuristics for the NP-Hard problem TPP
- Used Kubernetes to parallelize on 100 GCP nodes
- Ranked 9th in a course competition of 300+ teams

Server Monitor (Java): https://github.com/sakura6227/server_monitor
- Created customized remote monitoring software that allows to monitor the performance of 50 servers
- Created a graphic interface that streamlined the process of server monitoring with HTML and CSS

PintOS (ANSI C)**:**
- Designed and implemented a fully functional Operating System with an efficient scheduler and a comprehensive file system on a team of four

TECHNICAL SKILLS

- **Languages**: Python, Java, C, sql, R, Bash, C++
- **Technologies**: Numpy, Pytorch, MongoDB, Git, Linux