

Chenyang Eric Liu

<https://chy.io>

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Experience

Hudson River Trading - Algorithm Engineer

Aug '19 -

C++, Python

Algorithms and infrastructure for automated trading in financial markets

Two Sigma - Modeling Engineering Intern

Jun '18 - Aug '18

Python, Pandas, NumPy

- Extended portfolio simulation tool by tripling maximum length of simulation allowing research of long term signals
- Integrated new dataset by investigating and mitigating underlying data differences and flaws

Robinhood - Software Engineering Intern

Jan '18 - May '18

Go, Python, Django, PostgreSQL, Redis, FIX

- Persisted in-memory order queuer with PostgreSQL for market hours agnostic orders and increased scalability
- Built cryptocurrency market data service and implemented check-pointing for options market data
- Built models, APIs, wallet generation, and withdrawal generation for cryptocurrency custody solution

Dropbox - Software Engineering Intern

Jun '17 - Sep '17

Python, Typescript, React, mypy

- Implemented permissions logic for feature allowing users of any shared file to see who else is currently viewing
- Revamped sharing modals by building out privacy settings for folders

Snap Inc. - Software Engineering Intern

Mar '17 - Jun '17

Python, Typescript, Flask, React, Redux, AppEngine

- Rewrote backend for Snap's content management system and migrated data to new models on AppEngine
- Modernized frontend user interface and on-boarded internal customers to new tool

Google - Software Engineering Intern

Jan '17 - Mar '17

C++, gRPC

- Augmented network anomaly detection tool with packet capture and traceroute functionality
- Built command line interface allowing users to view results for any specified request between Google's servers

Apple - Software Engineering Co-op

Jan '16 - Aug '16

C++, Matlab, Scala, OpenCV

- Research, implemented, and deployed system to automatically detect UI regressions between Maps releases
- Built computer vision toolkit to extract and compare vector features from Maps screenshots

Textron Systems - Software Engineering Intern

Jun '15 - Aug '15

Matlab

- Implemented a convolutional neural network from scratch for image classification and segmentation

Education

Northeastern University

May 2019

Master of Science, Computer Engineering - Computer Vision and Machine Learning

GPA: 3.92

Bachelor of Science, Computer Engineering

GPA: 3.98

Honors: University Scholars Program (Top 1% - Full Merit Scholarship) | Huntington 100 | Honors Program

Activities: Honors Ambassador | Husky Ambassador | COE Peer Mentor | NU Symphony Orchestra

Eta Kappa Nu | Tau Beta Pi

Skills

Languages Python, Go, C++, C Familiar with MATLAB, SML, Typescript

Technologies Flask, Django, Pandas, NumPy

Projects

Rubik's Cube Robot

Python, C, Arduino, OpenCV, Solidworks

Developed 4-arm control system with custom 3D printed hardware to solve Rubik's cube in ~30 seconds

Northeastern Scheduler

Python, Flask, PostgreSQL, Swagger

Scraped class schedules to provide API for filtering and ranking course information