Chenyang (Eric) Liu
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EDUCATION

NORTHEASTERN UNIVERSITY | Candidate for Combined BS/MS in Computer Engineering

GPA: 3.93 | Graduation Date: May 2019
Honors: University Scholars Program (Top 1-2%) | Gordon CenSISS Scholar | Dean's List | National Merit Scholar
Activities: Honors Ambassador | Husky Ambassador | First Year Mentor - College of Engineering
NU Symphony Orchestra | Eta Kappa Nu | Tau Beta Pi

EXPERIENCE

DROPBOX | Software Engineering Intern   June '17 - Sept. '17

SNAPCHAT | Software Engineering Intern   Mar. '17 - June '17
Python, Typescript, Appengine, Flask, React, Redux
- Led the design and implementation of a content management system for all of Snap's support sites
- Hosted application on AppEngine using Flask and React/Redux

GOOGLE | Software Engineering Intern   Jan. '17 - Mar. '17
C++, gTest, gRPC, Protobuf
- Used C++, gRPC, and Protocol Buffers, to add packet capture and traceroute functionality to network tool
- Augmented packet capture/traceroute functionality to add custom capture logic and attach metadata

APPLE | Software Engineering Co-op   Jan. '16 - Aug. '16
C++, Scala, Matlab, OpenCV, gTest, CMake, Akka-Http, Git
- Led project to design new computer vision algorithms to assess the quality of Apple Maps
- Used Matlab, C++, and OpenCV to design and implement a new modular and fully tested toolkit
- Built Swagger documented web service with Scala and Akka-http to expose C++ algorithms using JNI bridge

TEXTRON SYSTEMS | Systems Engineering Intern   June '15 - Aug. '15
Matlab, Caffe
- Used MATLAB to implement a Feed Forward and Convolutional Neural Network from scratch
- Classified images from data set of 18,000+ images into 20 classes with 98% accuracy for target detection

SICA LAB | Research Assistant   Oct. '14 – Aug. '15
C++, C, Matlab, Mex
- Synchronized C++ and C functions with MATLAB using the Mex interface to increase performance
- Wrote MATLAB scripts to automate data collection and analysis for radar calibration

PROJECTS

NORTHEASTERN SCHEDULER

Python, Flask, PostgreSQL, Redis, Swagger, BeautifulSoup, React, Git, Heroku
- Scraped Northeastern University's class schedules using Python and stored data in PostgreSQL database
- Used Flask to create Swagger documented API for course, schedule, and professor information
- Implemented search functionality for users to dynamically filter and rank results

RUBIK'S CUBE ROBOT | Co-Designer

Python, C, Arduino, OpenCV, Solidworks
- Developed optimized 4-arm control system in Arduino and Python
- Used OpenCV for color detection and Kociemba Algorithm for the solution finder
- Coordinated Raspberry Pi and Arduino communication for movements of custom, 3D printed hardware

MISCELLANEOUS

Hackathons: HackNY (3rd Place, Best use of AWS), BigRed Hacks, CalHacks, YHack
Competitive Programming: HackerRank - 99th percentile of 110,000+ users

SKILLS AND INTERESTS

Proficient: Python • C++ • MATLAB   Familiar: • Java • Typescript C • Scala • HTML • CSS
Technologies: OpenCV • Flask • React • Redux • PostgreSQL • Protobuf • gRPC • gTest • Appengine