

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 | FUTURE SOFTWARE ENGINEERING INTERN

Jun. '17 - Sept. '17

SNAPCHAT | FUTURE SOFTWARE ENGINEERING INTERN

Mar. '17 - Jun. '17

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
- Augment packet capture/traceroute functionality with custom capture logic and to 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, YHacks

Competitive Programming: HackerRank - 99th percentile of 110,000+ users

SKILLS AND INTERESTS

Proficient: Python • C++ • Java • MATLAB Familiar: C • Scala • HTML • CSS

Technologies: OpenCV • gTest • Flask • PostgreSQL • Akka-http • Protobuf • gRPC

Other: Best Rubik's Cube Time: 14s • Fluent in Chinese • Volunteer at South Boston Boys & Girls club