# Chenyang (Eric) Liu https://chy.io

## **FDUCATION**

## NORTHEASTERN UNIVERSITY | CANDIDATE FOR COMBINED BS/MS IN COMPUTER ENGINEERING

GPA: 3.93 | Graduation Date: May 2019

Honors: University Scholar (Top 1% - Full Scholarship) | 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

Python, Typescript, React, mypy, Bazel

- Built viewer info settings for folders in Python, handling propagation logic and modifying sharing logic/permissions
- Used Typescript and React to redesign sharing modal for handling new settings

## **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 built with 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, Swagger, Heroku

- Scraped Northeastern's class schedules with Python and stored data in PostgreSQL
- Used Flask to build RESTful API for filtering and ranking course, schedule, and professor information

#### **RUBIK'S CUBE ROBOT** | Co-Designer

Python, C, Arduino, OpenCV, Solidworks

- Developed 4-arm control system using a Raspberry Pi, an Arduino, and custom 3D printed hardware
- Used Python/OpenCV for color detection and Kociemba's algorithm for solution finder

Hackathons: HackNY, BigRed Hacks, CalHacks, YHack HackerRank: 99th percentile of 110,000+ users

## SKILLS

#### LANGUAGES:

- Python, C++, Typescript, MATLAB
- Familiar with Java, C, Scala, HTML, CSS

#### **TECHNOLOGIES:**

- Web: Flask, React, Redux, Akka-http, Appengine
- Databases: PostgreSQL, Google Datastore, MySQL
- Other: OpenCV, Protobuf, Bazel, Git, Unix Terminal
- Systems: Linux, MacOS, Windows