

# Skills and Technologies

PROGRAMMING, SOFTWARE & TOOLS

• Proficient: Python, HTML5/CSS3, JavaScript MATLAB, Angular, Git, MS Suite, SQL | Familiar: TypeScript, Swift, Java, SQLite3, MongoDB

## **Education and Awards**.

### **New York University, Tandon School of Engineering**

Brooklyn, NY

B.S. IN MECHANICAL ENGINEERING | GPA: 3.279 | MAJOR GPA: 3.511 | F20 -S21 DEAN'S LIST

Aug. 2017 - May. 2021

NYU London Study Abroad. Society for the Advancement of Material Processes and Engineering, Trio Scholar Program, ASME (NYU Chapter)

June 2017 Recipient, International Baccalaureate Diploma with certificates in Mathematics, Physics, English

New York, U.S.A

# Work Experience \_\_\_\_\_

#### **Blue Eye Soft Corporation**

Remote

FULL STACK DEVELOPER INTERN Feb. 2021 - Present

- Develop and deploy a full-stack web application that connects the visually impaired with services based on their geospatial location.
- Utilize Google Drive API, Python and modules such as numpy/pandas to download, parse and perform data ETL on large amounts of data (8GB+) from the NPPES NPI Registry as well as from 50+ Google Sheet Documents and wrote unit tests to validate data accuracy.
- Utilize services such as WayScript to schedule cron jobs to run python scripts and upload JSON/CSV output files to an S3 Bucket.
- Utilize cloud services such as AWS EC2, AWS S3, AWS Cloudfront CDN, AWS RDS MySQL for deployment, content delivery, and storage.
- Write **SQL queries** as well as make API calls through asynchronous promises with **JavaScript/jQuery** to fetch and display data in the frontend.
- Develop and deploy a Flask application that queries the Clinical Trials Transformation Initiative open-source PostgreSQL database and returns relevant JSON data based on URL parameters passed.
- · Make modifications and fix bugs based on feedback from the first test users as well as from unit tests.

**New Jersey Transit** Remote

**EQUIPMENT DESIGN & ENGINEERING INTERN** 

Jun. 2020 - Aug. 2020

- Conducted research and developed engineering cost estimates, milestone payment schedules, and IFB/RFP specifications for the purchasing and overhauling of rolling stock (e.g. NYWW Ferry, Carteret Ferry, ALP-46A overhaul).
- · Coordinated with project managers & engineers to draft presentations & reports regarding the acquisition & overhaul of locomotives & buses.
- Utilized RFP and IFP specifications to develop Pre-Production meeting agendas regarding the purchasing/replacement of new rolling stock.

### **New York University, Campus Planning & Technical Services**

Brooklyn, New York

**ENGINEERING PROJECT ASSISTANT** 

July 2019 - Jun. 2020

- Coordinated with consultants/contractors and prepared construction drawings/ documents for construction projects and furniture installations.
- Reviewed building codes to assure that design complies with the minimum legal standards.
- Surveyed Tandon School of Engineering's facilities; developed and/or updated existing or proposed plans using AutoCAD.

## **WILD Technologies AI** SOFTWARE ENGINEER INTERN

London, England

Used Django to develop a backend that parses data and sends responses to the frontend using REST APIs.

Feb. 2019 - May 2019

- Worked on Front-End development using Angular, HTML5, CSS3, JavaScript and TypeScript.
- Developed scalable algorithms that parses relevant data from marathon websites using the Scrapy tool and built RESTful APIs using Python.

# **Projects**

#### **Contactless Delivery Drone**

Brooklyn, NY

SOFTWARE ENGINEER | HTTP://ravenclawdrone.herokuapp.com/

Aug. 2020 - Present

- · Design and simulate a contactless delivery drone which utilizes both drone and soft robotic technologies
- Spearheaded the development of a responsive web application for the team project using the React framework.
- Dockerized the application with **Docker** and **Nginx** and deployed application to **Heroku**, utilizing the CI/CD pipeline.

### **Employee Tracking Application**

Brooklyn, New York

SOFTWARE DEVELOPER | https://i6.cims.nyu.edu/~ec3219/web-app-edmund-cheng/flask.cgi

Apr 2021

• Developed a Flask application to allow for users to create, read, update, and delete employee data from a MongoDB database.