

# Edmund Cheng

SOFTWARE ENGINEER | TRAVELER | LIFELONG LEARNER

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## 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.
- Create membership levels and utilize **Stripe** to securely collect payments from subscribers who want to gain access.

### 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

London, England

SOFTWARE ENGINEER INTERN

Feb. 2019 - May 2019

- Used **Django** to develop a backend that parses data and sends responses to the frontend using **REST APIs**.
- 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/](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](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.