Edmund Cheng

SOFTWARE ENGINEER | TRAVELER | LIFELONG LEARNER

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Skills and Technologies

PROGRAMMING, SOFTWARE & TOOLS

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

Work Experience

Blue Eye Soft Corporation *Remote*

FULL STACK DEVELOPER *Feb. 2021 - Present*

- Develop and deploy a full-stack web application that connects the visually impaired with services based on their geospatial location.
- Used **HTML5**, **CSS3**, **JavaScript/JQuery** to develop **ADA compliant** and **responsive front end** layouts for optimal user experience.
- 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.
- 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.
- Develop a **Node** application/proxy server that interacts with data stored in **S3**, sorts and **caches** the data, and outputs a **JSON** response.
- 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.

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

Smylen (Contract) *Brooklyn, New York*

SOFTWARE ENGINEER *October 2021*

- Developed a Full Stack **Vue.js** and **Node.js** web application that takes in images of insurance cards and returns data in formatted plain text.
- Utilized **AWS-SDK** for node to interact with services such as **AWS S3** for persistent storage of images and **AWS Textract** for **OCR** and text extraction from images.

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://GITHUB.COM/EDMUNDCHENG221/EMPLOYEE-TRACKING *Apr 2021*

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

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)
- Recipient of the International Baccalaureate Diploma with certificates in Mathematics, Physics, English