

Sharon He

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🐙 xsharonhe

in sharon-he-dev

Skills

Languages: Python, JavaScript, Java, SQL, C, C++

Technologies: TypeScript, NodeJS (+ Express), React (+Gatsby, Redux), MongoDB, Django, Pandas, Scikit-Learn, Git, AWS

Education

University of Waterloo

Sept. 2020 - Apr. 2025

- Candidate for Bachelor of Software Engineering, B.S.E.

Experience

CheaprEats, Software Developer Intern

Aug. 2020 - Jan. 2020

- Built extensible clientele management system using **React** and **TypeScript**, increasing customer outreach by 8%
- Designed and created draggable components for virtual receipt builder and created pipeline to save user receipt elements using **GraphQL** API endpoints, **Node.js** and **MongoDB**

Elucidate AI, Data Science Intern

Oct. 2020 - Dec. 2020

- Built a **Decision Tree** classifier to predict if a potential buyer would become a purchaser with 73% accuracy
- Developed a **K-Means** classifier with **scikit-learn** to identify purchaser behaviour trends, increasing client sales by 12%
- Built a workflow to automatically combine over 1,000,000+ rows of data using **Python**, saving over 80+ hours of dev time

XNM Creations Inc., Intern

Nov. 2018 - Sep. 2020

- Created profit and loss reports, inventory management systems, and keyword advertising analysis, decreasing advertising costs by 10%, using **Excel** and **Python**
- Developed and maintained company website using **JavaScript**, **jQuery**, and **Liquid**, serving 20,000+ customers annually

Coronavirus Visualization Team, Lead Technological Analyst

Jun. 2020 - Sep. 2020

- Led a team of 8 to investigate the impact of the oil on the aviation industry during COVID through data visualizations
- Web scraped from international embassy websites using **BeautifulSoup**, reducing manual work by 120 hours
- Created a **Python** script to clean large Twitter datasets used the **VADER** library to perform sentiment analysis

Projects & Awards

BridgeIT, Best Overall Hack at SheHacks (Top hack of 100+ submissions)

<http://bit.ly/bridgeithack>

- Led a team of four to develop a full-stack web application using **React**, **PostgreSQL**, and **Django** aimed at connecting remote communities with local health organizations to encourage donations of excess medical supplies
- Designed and implemented recommendation engine that optimizes US-Canada border-crossing times with **Google Maps Distance Matrix API**, **Django**, and **scikit-learn**, and connected with front-end React components

Open Door, TypeScript, Django, VADER, NLTK, PostgreSQL, Redux

http://bit.ly/opendoor_dev

- Data-driven platform that helps students find their ideal rental suiting their unique budget and preferences
- Implemented a **Django** REST API workflow to develop the analytics platform using **VADER** to perform sentiment analysis and **NLTK** to summarize sentiment using word frequency and store metrics in **AWS RDS** database
- Incorporated **Nivo**'s visualization libraries, and built search bar and infinite scrolling **React** components with **TypeScript**

OffEye, Flask, Sqlite, Bootstrap, Socket-io

http://bit.ly/sharonhe_offeye

- Developed a multi-user realtime application to automate job hunting process using **socket.io**, and **Flask** server
- Enabled speech to text functionality and automating email notifications with **Python** and a **sqlite** database

Everest, React, Redux, Mailchimp API, Firebase, Node.js

http://bit.ly/sharonhe_everest

- Created an e-commerce fitness website integrating **Stripe** payments, **Firebase** authentication, and **Node.js** server

Tetris, JavaScript, Bulma

http://bit.ly/sharonhe_tetris

- Recreated Tetris using **JavaScript** and **Bulma** with four-tier difficulty levels

Publication

Healthcare Automation in COVID (Nov. 2020). Golden Meteorite Press. Supervised by Dr. Mardon. https://bit.ly/sharon_pub