Sharon He

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xsharonhe
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
- Led front-end architecture and collaborated with five interns

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 adveritising analysis, decreasing advertising costs by 10%, using **Excel** and **Python**
- Developed and maintained company website using **JavaScript, jQuery**, and **Liquid**, serving 20,000+ customers anually

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