

Muhammad Zaman

DATA SCIENTIST · FULL STACK DEVELOPER · BACHELOR OF COMPUTER SCIENCE

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Awards & Skills

Languages: Python, JavaScript, HTML/CSS, R, Racket, C/C++.

Frameworks and Tools: Pandas, Numpy, BeautifulSoup, Scrapy, SciKit-Learn, Matplotlib, Tensorflow, Seaborn, Plotly, Keras, Pyspark, Pygame, Flask, Node.js, Express.js, React, Next.js, jQuery, Bootstrap, Git, Postman.

Awards and Scholarships: PPG Canada Scholarship (2021), University of Waterloo President's Scholarship (2021), CRC Robotics Leadership Award (2020), Les Prix du Mérite en Histoire (2019), Centennial Regional High School Principal's Honor Award (2020).

Education

University of Waterloo

Waterloo, Canada

COMPUTER SCIENCE MAJOR (TERM 1B)

2021 - 2026

- Relevant Coursework: Functional Programming, Algorithm Design & Data Abstraction, Probability, Statistics (Advanced Level), Linear Algebra
- Activities and Societies: Computer Science Club || Data Science Club || UW Cyber Security || University of Waterloo Finance Association

Work Experience

SPARK

Remote

FULL STACK DEVELOPER (PART TIME)

July 2021 - PRESENT

- Developed front-end of website using **React** and **Bootstrap** to educate 500+ children in third-world countries
- **Accelerated load-time by 17%** by code-splitting, utilizing CDNs, minifying code, and removing unnecessary content and plugins
- Standardized all design outputs with a **mobile-first** approach along with addressing previous UX/UI designs issues in order to ensure app uniformity
- Offered design ideas and supported lesser skilled members of the team by providing online resources to grow and develop skills

CrowdDoing

Remote

DATA SCIENCE INTERN

May 2020 - Aug. 2020

- Collected **data of 65+ herbs** from different sources including the National Library of Medicine using data crawling techniques through **Python** with libraries such as **Scrapy** and **BeautifulSoup**, in order to provide data to the analytics team with the product's potential benefit, safety concerns, etc.
- Processed and cleaned dozens of unstructured data-sets through libraries such as **Pandas** and **NumPy** in order to allow for data to be processed correctly
- Applied cluster analysis techniques such as **K-means clustering** to classify 100+ nutrients into ingredients and categories for recommendation engine
- Assisted in the development of a recommender system to suggest medicinal foods based on user choices from the clustered data

Elevate the Future

Montreal, Canada

PRESIDENT ETF CANADA

May 2020 - May 2021

- **Founded and formed** the first Canadian branch of Elevate the Future, which held computer science workshops for youth across Montreal.
- **Held dozens of workshops** to teach the basics of vanilla front-end web development (**HTML, CSS, and JavaScript**) to attendees all across the world

Projects

Amazon Reviews Scraper

Solo Project

COMMON FREELANCE OPPORTUNITY, CREATED BECAUSE OF ITS REAL WORLD USE AND DEMAND

July 2021

- Leveraged **Python** and **Scrapy** to scrape multiple product reviews from different products based off the unique ASIN number provided by Amazon
- Added cool down and open in-browser to prevent the program from getting caught in Amazon's CAPTCHA trap and continue downloading reviews

Vaccinator

Solo Project

A FUN REMIX OF SPACE INVADERS SUBMITTED TO HACK-CADE HOSTED BY MLH

May 2021

- Employed **Python** and **Pygame** to develop a game where the player is a vaccine with the goal of getting past as many outbreaks of Covid-19 as you can
- Implemented games components such as the vaccine (player), shots and viruses (enemies), using **OOP principles**

Stockify

Solo Project

DATA VISUALIZATION

May 2021

- Created a stock visualizer capable of displaying an interactive graph of any S&P 500 stocks with different comparisons such as Opening value, Daily High, Daily Low Price, Closing value, or Volume traded compared against the date
- The graphs are generated using the **Python** library **Plotly** and the data is organized using **Pandas**

Forex

Solo Project

A WEB APPLICATION THAT ALLOWS FOR PEER-TO-PEER CURRENCY EXCHANGE

December 2021

- Produced a full-stack web app that features a discussion form that allows for people to connect and trade their desired currencies directly
- Focused heavily on UX/UI design, the front end is built using **React** and the back end with **Node.js**
- Web application includes authentication using **JWT signature verification** in order to manage accounts and provide contact information in the forum