Muhammad **Zaman**

Data Scientist · Full Stack Developer · Bachelor of Computer Science

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Awards & Skills

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

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, Firebase.

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*
Bachelor of Computer Science *2021 - 2026*
- Relevant Coursework: Functional Programming, Algorithm Design & Data Abstraction, Probability, Linear Algebra, Statistics (Advanced Level)
- Activities and Societies: Computer Science Club, Data Science Club, UW Cyber Security, University of Waterloo Finance Association

Other Institutions: Science at Marianopolis College (2020-2021), Centennial Regional High School Talented & Gifted Program (2015-2020)

Experience

SPARK *Remote*
Full Stack Developer (Part-Time) *July 2021 - PRESENT*
- Developed front-end of the 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*
- Elevate the Future is a student-run worldwide non-profit with the goal of helping students attain skills in Computer Science and Business
- **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

Other Experiences: Customer Service Agent at Teleperformance (Jul 2021 – Sep 2021), Teaching Assistant at Kumon (Apr 2019 – Aug 2020)

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 on 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 Full-stack app that features a discussion form that allows for Peer-to-Peer Currency Exchange *December 2021*
- Created a chat using **Firebase** which allows for unlimited messaging and signing in with Google
- Focused heavily on **UX/UI design** by using frameworks like **Tailwind CSS**, 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
- Utilizes **API** to display current exchange rates of commonly traded currencies on the dashboard accessible upon Login