Ismam **Imon**

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EDUCATION

University of British Columbia, **Vancouver, BC**
Bachelor of Science, 2022 **|** Cognitive Systems
Relevant Coursework: Software Construction, Algorithm Design and Analysis, Machine Learning and Data Mining, Calculus I-III, Relational Databases, Computer Vision

SKILLS

Languages: Python, JavaScript, SQL, R, C++, Java
Frameworks/Libraries: Flask, NumPy, Scikit-learn, Pandas, Matplotlib, React.js, Node.js, OpenCV, Keras
Tools/Services: Docker, Kubernetes, Nginx, PostgreSQL, MongoDB, AWS, Tableau, Postman Services

EXPERIENCE

Full-Stack Developer and Data Analyst, Research Assistant | *UBC School of Population* |
https://www.pulsecanada.ca
React.js, React-Router, Flask, PostgreSQL, Docker, Kubernetes, DigitalOcean, Figma

Jan 2022 – Current

Phase1: Developed a dynamic web application from **scratch** to collect users perceptions on children's playability zone around five cities in Canada. Optimized the design of UI, UX with **HTML5**, **CSS3** and UI libraries like **Bootstrap**. Used **React Hooks** to use state inside functional components to decrease complexity and improve maintainability. Designed multiple pages with different functions using **React.js** and used **React-Router** to navigate these pages. Designed backend server (**Flask**) with **RESTFUL API** for frontend, implemented **HTTPS requests** using **Fetch API** to manipulate data and render images. **CORS** was used to allow cross-origin connections. DigitialOcean **droplet** is utilized for creating **PostgreSQL** database to store user perception and their demographics. Repeatedly worked on **Docker** for both frontend and backend. Implemented **YML/YAML** files to configure the load-balancers using **Kubernetes**. Moreover, used **Git** for source control.
Phase2 (current): Using QGIS to sample city shapefiles (latitude, longitude) pairs at 20m intervals to obtain valid Google Street Images

Web Developer Intern | *Building-Blocks, UBC Neuroscience Club* | Vancouver, BC
JavaScript, HTML, CSS, Node.js, React.js, MongoDB, Figma

May – Aug. 2021

Project Description: The project was administrated by UBC Neuroscience Club under the supervision of Andy Man Yeung Tai (Ph. D.). The vision is to build and design a peer-to-peer consultancy platform for university students suffering from mental health issues. Due to the long waits and discomfort of in-person consultations, students can choose their preferred mentors and connect through the app's chat system, as well as attend video calls.
Responsibilities: Hands on **HTML5** and **CSS** to design web pages and user centric dashboards. Optimized design and structured layout using **Flexbox** and grid. **React.js** was used to create client components and web pages with navigation bar. Utilized **Redux** to share states across different components in order to improve performance and flexibility. Hands on experience using **Node.js** and **JWT tokens** for user authentication and saving login information with **Cookie** and **Session**. Additionally, implemented **React Axios** to send multiple **HTTP requests** from frontend to backend. Built and designed a **stable-matching algorithm** using **JavaScript** from **scratch** to allow potential mentors to match with mentees based on each other's preferences.

Data Analyst (Capstone Project) | *HealthQB Technologies Inc.* | Vancouver, BC
Python, NumPy, Scikit-learn, Tableau

Jan – April 2022

Project Description: *This project was supervised by Dr. Oswald Barral (Lead Data Scientist). It analysed the feasibility of various Wearable Gadgets for Chronic Pain Patients.*
Responsibilities: Performed literature review on multiple scholarly journals to collect sampling parameters and sensor configurations of 7 specific wearable gadgets. The best fit with HRV accuracy and Infrared sensors were chosen for further analysis. Used **Python** to make **API requests** to Apple-Watch, Oura and Biostrap, and cumulated 3 years of HRV & HR data. Subsequently, **EDA** and **statistical analysis** (**correlation and covariance**) were performed to compare the datapoint accuracy of sleep intervals, recording durations, and the abnormality of each device's sensor parameters

Data Science Intern | *Zindi* | Cape Town, South Africa
Python, R, Pandas, NumPy, Seaborn, Matplotlib

Feb – April 2021

Project Description: Prepare and compile Data Science Competition starter codes.
Responsibilities: Translated and compiled **Python** starter codes to **R** to enhance user adaptability. Required thorough understanding of Python Scripts to replicate **EDA** on R. Exposed to **LinearRegression**, **RandomForestClassifier** and utilized **CatBoost** to predict results with high accuracy. Designed a **pipeline** to catch suspicious participants in the competition. **Probabilistic Model** was implemented to identify **abnormality** in participants' submissions within a given timeframe.

Sales Data Analyst | *IK Jewellers Ltd.* | Dhaka, Bangladesh
Python, Microsoft Excel, NumPy, Tableau

Nov 2020– Current

Project Description: *This project utlilizes the sales report of the firm to further analyse and predict stock updates and customer behaviours.*
Responsibilities: Performed **EDA** on **sales datasheet** which contains information on customers, jewellers, and products. Assisted the company in **reducing stock surplus** by evaluating and predicting the **top-selling products** for each jeweller**. Increased** sales by strategically executing marketing campaigns based on **customer niche** and **demographics.**

COURSE AND OTHER PROJECTS
Movie Theatre DBMS | *CPSC304 (Relational Databases)*

SQL, php, HTML, CSS
Built and Designed a GUI of Movie Theatre Database using **php**, **HTML**, **CSS**. Used **SQL** to setup the **schemas** and **tables** for Movies, Customers, Tickets, Food Stalls, Theatres and individual Halls. Implemented complex queries for users to play with the web interface and perform **INSERT**, **DELETE**, **UPDATE**, **Nested Aggregation**, **Project**, **GroupBy** and **DIVISION** Operations. Number of Teammates: 2

Trading Bot
Python, Scikit-learn LSTM model, Binance API, Websockets
EDA on Time Series Data; **Normalized** features with **MinMaxScaler** and **LogReturn** for optimum results; Analyzed technical indicators using **TA-Lib**; and **live-streamed** crypto charts using **WebSockets.**

OTHER WORK EXPERIENCE
STEM for All | Vancouver, BC

Co-Founder
- Won seed funding of $1000 from Youth Impact Challenge, a BC-based non-profit organization
- Hosted the first virtual summer camp with 62 participants from Bangladesh
- Designed curriculum with a team of 8 volunteers to provide collaborative learning of Python
- Engaged participants to connect on Discord, conducted live sessions Zoom with activities for interactive level.

VOLUNTEER EXPERIENCE
Bangladesh Students Association UBC | Vancouver, BC

Vice President of Internals
- Conducted 6 successful events planned through informative meetings with other executive members
- Collaborated with student clubs for hosting events, expanding communication and organizational skills
- Scheduled meetings with specialists, developing financial, management and negotiation skills

INTERESTS: Hiking, Entrepreneurship, Volleyball, Trading, Psychedelic Research