# Ismam Imon

+1 604-723-9851 | Email | GitHub | Website | LinkedIn

#### **EDUCATION**

## University of British Columbia, Vancouver, BC

Bachelor of Science, 2022 | Cognitive Systems

#### **SKILLS**

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

**Libraries/Environments**: React.js, Node.js, Express.js, Flask, NumPy, Scikit-learn, Pandas, Matplotlib, OpenCV **Tools/Services**: Docker, Kubernetes, Nginx, PostgreSQL, MongoDB, RTK Query, AWS, Tableau, Postman

#### **EXPERIENCE**

# Full-Stack Developer & Data Analyst | Research Assistant | *UBC School of Population and Public Health* https://www.pulsecanada.ca

React.js, React-Router, Flask, PostgreSQL, Docker, Kubernetes, Figma

Jan 2022 – Current

Project: Develop a dynamic web application from **scratch** to collect users' perceptions of neighbourhoods in Canada for children's playability. Supervisor: Emily Gemmell (Ph.D.), UBC.

Responsibilities:

- Designed a web application using HTML5, CSS3 and UI libraries like Bootstrap
- Used React Hooks and React-Router to decrease complexity and improve maintainability between components
- Performed CURD operations and maintained client-server connectivity with RESTful API
- Implemented the database using PostgreSQL and performed SQL query operations to store and aggregate JSON image data
- Maintained **Docker** images to incorporate any changes for client or server edits
- Implemented YML/YAML files to configure the load balancers through Kubernetes
- Utilized Git for source control and DigitalOcean to deploy/host the app
- Currently 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, Express.js, React.js, MongoDB, Figma

May – Aug. 2021

Project: To prevent in-person discomfort for university students suffering from mental health issues, we built and designed a peer-to-peer consultancy platform to connect students and mentors virtually. Manager: Andy Tai (Ph.D.), UBC. Responsibilities:

- Designed and optimized a **stable-matching algorithm** using JavaScript from **scratch** to match mentor-mentees based on individual preferences
- Worked on HTML and CSS to re-design user-centric dashboards, and structured layouts using Flexbox
- Maintained CURD operations through axios requests and implemented Redux to persist state variables
- Hands-on experience using Node.js and JWT tokens for user authentication and session storage

#### **PROJECTS**

# IK GOLDBANK | Fintech Service | Dhaka, Bangladesh | GitHub

React.is, Express.is, Node.is, MongoDB, AWS

Oct 2022 - Current

Project: A vision to develop a web-app to assist individuals in applying for small loans collateralized by gold, and buying physical gold virtually.

Responsibilities:

- Simplified the app structure using RTK Query to enhance fetching and caching data
- Built a dynamic **loan calculator** to allow for loans of up to \$15,000 within one day of request.
- Implemented custom hooks to restrict components for customers
- Developed logic for user authorization and authentication
- Update and render everyday gold prices through MongoDB atlas

**RELEVANT COURSEWORK:** Software Construction, Algorithm Design and Analysis, Machine Learning and Data Mining, Calculus I-III, Relational Databases, Computer Vision

INTERESTS: Hiking, Entrepreneurship, Volleyball, Finance, Psychedelic Research, Reading

#### **INTERNSHIPS AND OTHER PROJECTS**

## Data Analyst (Capstone Project) | HealthQB Technologies Inc. | Vancouver, BC

Python, NumPy, Scikit-learn, Tableau

Jan - April 2022

Project. Analyze the viability of various Wearable Gadgets for Chronic Pain Patients and assist health practitioners in better understanding their patients. Supervisor: Dr. Oswald Barral (Lead Data Scientist).

Responsibilities:

- Performed literature review on multiple scholarly journals to collect sampling parameters and sensor configurations of multiple wearable gadgets. The best fits with HRV accuracy and Infrared sensors were chosen for further analysis
- Cumulated 3 years of HRV & HR data through API calls from Apple watch, Oura, and Biostrap
- 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: 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 **Linear Regression**, **RandomForestClassifier** and utilized **CatBoost** to predict results with high accuracy
- Designed a **pipeline** to catch suspicious participants in the competition: a probabilistic **model** to identify the **abnormalities** in participants' submissions within a given timeframe

#### 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 set up 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.

# **VOLUNTEER 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.

# 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