Adshayan Balendra

Computer Engineering | University of Waterloo

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TECHNICAL SKILLS

Languages: Python, C++, Java, JavaScript, HTML, CSS, SQL(PostgresSQL,sqlite3)
Frameworks: Flask, Pandas, Django, NumPy, scikit-learn, Tensorflow, REST API, Cypress, Selenium, Plotly
Tools/Technologies: Git, JIRA, Jupyter Notebook, Power Apps, Dynamics 365, Postman, Databases

EXPERIENCE

Software Developer   Brampton, CA
Loblaw Companies Limited   *Sept. 2020 - Dec. 2020*
- Rebuilt and deployed team's flagship **Microsoft PowerApp** to reduce paperwork and repetition increasing efficiency for warehouses **nationwide**
- Developed an efficient **JS** program that parses warehouse data to build automated supervisor reports in real-time
- Restructured **back-end** client to **transition** a suite of warehouse applications to support a new Microsoft client interface increasing data transfer speeds by **40%**
- Built a **proof of concept** virtual map system to promote safe and minimum contact intra-office travel by providing colleagues with real-time and accurate crowd heatmaps for Loblaws company wide hackathon

Python Instructor   Toronto, CA
Motala Business School   *Oct. 2020 - Dec. 2020*
- Co-developed a **Python for Data Analysis** course, creating lecture material on topics such as **Pandas & Numpy**
- Utilized **Jupyter Notebooks** to create exercises on course material to enrich course content

Quality Assurance & Research Student   Toronto, CA
University Health Network   *Jan. 2020 - Apr. 2020*
- Established an **automated** testing suite within **Cypress IO** for regression and end-to-end testing; reducing validation testing time by **94%**
- Developed and executed test plans for medical grade mobile and web applications to meet product quality standards and compliance to **ISO 13485** for medical devices
- Worked with the Associate Director to assess the viability and requirements of data visualizations for a researcher platform, accumulating real time clinical data with tools such as **Elastic Stack** & **R Shiny**
- Collaborated with product managers and developers within a scrum-based agile workflow, using tools such as **JIRA**

PROJECTS

 Diabetes Doctor | *Flask, Pandas, Sklearn*
- Co-developed a diabetic platform that screens users for diabetes and tracks their glucose levels & other medical data
- Built entire back-end which involved user creation, authentication, data collection using **Python** and **Flask**
- Designed and implemented a **CRUD Rest API** to handle patient and test data harnessing a **Sqlite** database
- Diagnoses user through a **random forest classifier** machine learning model with an accuracy of **98%** on test data

 Garage Management System | *C++, Object Serialization, Data Management*
- Designed a **C++** program to manage inventory by building a database where **objects** are **serialized** & stored in files
- Implemented a **CRUD** like structure to enable efficient creation and management of inventory data

 Detection of Diseases | *Pandas, Python, Sklearn*
- Developed a **supervised** machine learning model for the detection of Parkinson's and breast cancer
- Attained a **95%** accuracy for both models using a **XGBClassifier** and a **linear SVM** respectively

 COVID-19 Dashboard | *Python, Pandas, Plotly*
- Built an interactive **real-time** COVID-19 dashboard that analysed and **visualized** John Hopkins COVID data
- Implemented a machine learning model to predict number of cases & deaths two weeks into the future using **Prophet**

 Cryptoboard | *Python, Flask, SQLite3*
- Developed a website that manages a user's cryptocurrency portfolios utilizing a cryptocurrency API for price data
- Designed and integrated features like user **verification**, portfolio management and **authenticated** transactions to actively manage portfolios efficiently and **securely**

EDUCATION

University of Waterloo   *Sept. 2019 - Apr. 2024*
Bachelor of Applied Science in Computer Engineering, Honours