Adshayan Balendra

Computer Engineering 1B | University of Waterloo
adshayanB | adshayan.balendra@uwaterloo.ca | (647)-809-5275 | adshayan-balendra

SKILLS

Languages: Python, C++, Java
Technologies/Tools: Git, Insomnia, Android SDK, Vs Code, Eclipse, PyCharm, Selenium
Frameworks: Jupyter, Cypress, Pandas, Plotly

EXPERIENCE

Quality Assurance & Research Student - ***Jira, Insomnia, Cypress*** Toronto, Ontario
Center for Global eHealth Innovation @ University Health Network *January 2020 - April 2020*

- Spearheaded the implementation of automation testing, reducing validation testing time by **94%**
- Developed end-to-end testing scripts using **JavaScript** and **Cypress** improving testing efficiency by **95%**
- Performed manual and automated test execution, results analysis, wrote bug tickets in **Jira** and validated fixes
- Participated in an **Agile** scrum team responsible for all aspects of software delivery
- Researched the viability and requirements of a data visualization researcher platform, aggregating clinical data with tools such as **Elastic Stack's Kibana** and **R shiny**

PROJECTS

COVID-19 Dashboard - ***Python, Pandas, Plotly***

- Developed an interactive real-time COVID-19 dashboard using **Python**, **Voila** & **Jupyter**
- Collected and cleaned COVID-19 data from Johns Hopkins, displayed data using **plotly** and implemented interactivity using **Jupyter Widgets**
- Implemented a machine learning model to predict number of cases & deaths two weeks into the future using **Prophet**
- Harnessed predicted data to build an interactive plot that allows the user to query and view country data
- Visualized geospatial data using **Follium**

Detection of Diseases- ***Python, Pandas, Sklearn***

- Developed a supervised machine learning model for the detection of Parkinson's and breast cancer using **Python**, **Pandas** & **Sklearn**
- Implemented a breast cancer detection model with **94%** accuracy using a linear support vector machine learning model
- Built a Parkinson's diagnosis model using a XGBClassifier model on a dataset of **195** patients attaining a **95%** accuracy

Finance Projects - ***Python, Plotly***

- Developed Python scripts that perform various finance analyses including plotting stock prices, returns and calculates values of a company's stock
- Harnessed a finance API that fetches stock data and parses it into a JSON format using the requests package in Python
- Devised a script that creates visual balance sheets using a finance API to extract company data and **Plotly** to visualize

T6 Labs - ***Java, Android, Git***

- Developed an Android application to aid in the growth of local businesses by providing users a medium to showcase their products on a community platform
- Designed and implemented a splash page using **Java & Android** for a more welcoming user interface
- Collaborated in a team of 6 developers using a **Git** pipeline

Flappy Bird - ***Java, Android***

- Developed an app clone of the popular game Flappy Bird using Android
- Implemented core game logic including sounds and scoring using **Java**, **libGDX library** and **Android tools**

Arduino Car - ***C++, Processing, Arduino***

- Built an **autonomous** Arduino car using a Bluetooth Arduino, motor shield, range finder and light sensors
- Developed a system algorithm that calculated distance and wheel speed from sensor values using **C++**
- Implemented a visual console that depicts speed of the car and distance of objects using **Processing** and **Bluetooth**

EDUCATION

University of Waterloo *September 2019 – April 2024 (expected)*
Candidate for Bachelor of Applied Science in Honours Computer Engineering, Co-op