SANAT BHALLA

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EXPERIENCE

Data Engineer
Ottawa, ON (Remote)
InnovaPost
May – Aug 2021

- Developed ETL/ELT Pipelines that performed various mappings/transformations from Oracle Legacy Databases and Azure DataLake storage to the AzureSQL Server using Python
- Used odbc/jdbc drivers in Databricks to connect to the source and target databases and used Apache Spark and its APIs to initiate and build the Pipeline
- Developed and Documented various tests to check the working of different parts of the Data Pipeline at the functional level

PROJECTS

Movie Recommender | Python
February 2021

- Developed a Machine Learning Movie Recommendation System using Python based on the concept of **User–User Collaborative Filtering**
- Used Python Libraries such as Numpy and Pandas to work with DataFrames, arrays and wrote various algorithms to clean, standardize and structure the final solution

Connect_X Game | C/C++
January 2021

- Developed a backend model for the game Connect_X that follows the conventional trend of the game Connect4 but with a greater variety of options
- The algorithm of this model allows the user to connect any positive number of pieces instead of just 4 to win the game enabling the alteration of the width and height of its structure thus ranging the complexity of the game from easy to hard

Accounts | C/C++
July 2020

- Developed an accounting backend model using C++ allowing user management of different types of accounts
- Added functionality for various operations like crediting and debiting funds from accounts
- Used Object Oriented Programming to provide the client interface

Stock Movement Visualizer | Node.Js
December 2020

- Developed an app to visualize changes in stock prices
- Designed front-end of the web app using HTML-CSS, added functionality with JavaScript and hosted using Heroku
- Monitored the backend during the runtime using NodeJs/Nodemon

ACTIVITIES

Data Science Club (2020 – 21)

- Developed a **Data Visualization Project on NBA Statistics** using Jupyter Notebooks for the UW Data Science club that helped me understand the basics of Machine Learning models
- Used Python Libraries such as Numpy and Pandas to explore and clean the data
- Used Plotly to visualize and present the data to draw conclusions

Head Boy (2019 – 20)

- Headed the students' council (2019) and was responsible for major decisions in maintaining the school's decorum
- Nominated by the school for Indo-Russian meet held at New Delhi, India

Vice Head Boy (2018 – 2019)

- Organized various activities as well as planned large events for the school and managed contributions (both financial and in kind) of over 5000 students
- Collaborated with individuals/groups at different stages to represent the school

EDUCATION

University of Waterloo
Waterloo, Canada

2020 - 25 (expected)

Candidate for Bachelor of Computer Science

Member of UW Data Science Club

DPS Kalinga
Cuttack, India

2006 - 20

AISSE (class 10) – 92.4%

AISSCE (class 12) – 96.6%

SKILLS

Languages

Python, C/C++, JavaScript, SQL
HTML/CSS, DrRacket, TypeScript

Data Science / Engineering

Scikit-learn, MySQL, Apache Spark, Databricks, MongoDB

Software/Web Development

Angular, NodeJs/Nodemon, Bootstrap

Others

Git, GitHub, Azure DataFactory

Currently Learning

React.js, R, Android Studio, Hadoop, AWS

AWARDS

University of Waterloo's President's Scholarship of Distinction

Microsoft Professional Orientation : Big Data

Master DPSK 2020 at DPS Kalinga

Highest Scorer at National Basketball Championship 2019

INTERESTS

Data Science
Software Engineering
Software Development
Machine Learning
Full Stack Development