JASMAN SAHI

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Skills

LANGUAGES

C/C++
Python
Java
JavaScript
Lua
SQL/MySQL/SQLite
VBA
BASH
Assembly
VHDL
Verilog
NoSql
Kotlin
Golang

TECHNOLOGIES

C/C++ in Unix environment
Eclipse Development
RISCV architecture
Flask
Nodejs
Truffle Suite
PowerApps
Diptrace
Eagle
Reactjs
MatLab
Git
Modelsim
Docker
Firebase
Mangodb
Android Studio
Jupyter Notebook

Revelant Course

System Programming and Concurrency, Algorithms and Data Structures, Compliers, Probability theory and statistics, Numerical Methods, Database Systems, Computer Networks, Real time Operating Systems, Distributed Systems, Reinforced Learning

Employment

Cognizantly inc.
Lead Software Developer   Sep. '20 - Dec. '20
• Developed a full-stack application to display behavior analytics of traders using the Plaid API, with **Flask** framework and **ReactJS** for the frontend
• Designed the application flow and backend architecture using **Firebase's** Real-time database
• Containerized development with **Docker** to ensure the development was standardized
• Cleaned trading data then applied financial algorithms and visualized the data using **Jupyter notebook** to display financial trends from user data
• Set up the structure for **Kubernetes** using Okteto's services to enable a wider variety of testing

Nuclear Promise X
Nuclear Software Developer   Jan. '20 - Apr. '20
• Created Full Stack applications using Powerapps with Sharepoint/SQl and **Reactjs** with **Nodejs/Flask**
• Designed a **Java Rich Client Application** using **SWT** libraries to generate and log documentation files
• Created predictive scripts using **Natural Language Processing** (**Lemmatization** and **Word-Encoding**)
• Automated testing using RPA bot with **UIPath** to reduce testing time by **60 %**
• Developed and presented an initial **Etheruem** supply chain Dapp using **truffle** suite with **Nodejs**

National Bank Financial
Electronic Trading IT Analyst   May '19 - Aug. '19
• Developed **Python** scripts to automate
   ▪ Web scraping/ Automation with **Selenium** reducing time-consuming tasks
   ▪ **MySQL** server data updates to ensure accurate data and manage records
   ▪ Extraction and manipulation of various data for pattern matching
• Created multiple **PowerShell** scripts to automate tasks and expand past scripts
• Constructed several **SQL** queries and improved performance of existing SQL scripts
• Created Excel Macros in **VBA** to improve efficiencies in banking procedures and document processing

Waterloop Design Team
Electrical Sub Team Member   Jan. '19 - Apr. '19
• Used **Eagle** to create the schematic and board layout for an **Arduino** shield used in the pod
• Assisted in carrying out battery testing to ensure device information and usage was correct

TD Bank
Automation Controller/Access Analyst   Sep. '18 - Dec. '18
• Created a database in Microsoft Access using **SQL** queries and **VBA** to set up a system to log process changes improving communication
• Optimized scheduling of processes by creating **Python** scripts to increase efficiency
• Created functions using **Blue Prism** to automate various bank-related tasks
• Wrote test cases for processes along with testing additional processes

National Research Council Canada
Application Developer   Jan. '18 - Apr. '18
• Developed an online application using **HTML**, **CSS**, and **JavaScript** to display relevant information
• Wrote **Java** Classes for **MySQL** backend
• Created **MySQL** Queries to pull and save data to be used in the dashboard and other processes
• Conducted a Functionality Analysis of a Data Acquisition Server Device using TCP to command line

Projects

Stock Predictor
• Created a deep learning model with **LSTM** to predict stock values using its time-series data from the alpha vantage API, in **Python** with **Keras** and **Tensorflow**

Information Dashboard
• Full-stack using **Reactjs** for the front end and **Flask** for the backend
• Used Reddit API and open weather API to fetch relevant information about the weather and popular subreddit trends

PDF Data Mining and Budgeting Analysis Script
• Mined relevant data found in personal banking PDF using **Regex** and then organized it into a **Pandas** data frame and CSV
• Data cleaned and processed using **TFIDF** and **Vectorization** on names to be able to predict expenditures category
• predicted expenditures category with **Random Forest Classifier** and analyzed using **Matplotlib** and summations for personal budgeting

Internet Traffic Analysis and Organization
• designed and implemented an Entity-Relationship model in 3nf normalization for internet traffic datasets in **MySQL**
• Analyzed data in **Jupyter notebook** to predict the type of attacks occurring using the **DecisionTreeClassifier** model

Education

Candidate for B.A.Sc., from the University of Waterloo Computer Engineering   Sep. '17 - Apr. '22