JASMAN SAHI

4A CE

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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
Mongodb
Android Studio
Jupyter Notebook
PowerBI
Hadoop/Spark
Thrift

Relevant Courses

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

Employment

Cognizantly inc.   Sept. '20 to Dec. '20
Software Developer
• Developed a full-stack app to display behavior analytics of traders using Plaid API with **ReactJS** and **Flask**
• Designed the app's flow and backend architecture with **Firebase Realtime Database** and containerized with **Docker**
• Cleaned trading data then applied financial algorithms using **Jupyter notebook** to display financial trends
• Set up the structure for **Kubernetes** using Okteto's services to enable a wider variety of testing

Nuclear Promise X   Jan. '20 to Apr. '20
Nuclear Software Developer
• Created Full Stack applications using Powerapps with **Sharepoint/MSSQl** and **Reactjs** with **Flask/Nodejs**
• 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   May '19 to Aug. '19
Electronic Trading IT Analyst
• Developed **Python** scripts for automation using **Selenium** and extracting/manipulating data
• Created multiple **PowerShell** scripts to automate tasks and expand past scripts increasing overall efficiency
• Constructed several **MySQL/SQLite** queries and improved performance of existing queries
• Created Excel Macros in **VBA** to improve efficiencies in banking procedures and document processing

Waterloop Design Team   Jan. '19 to Apr. '19
Electrical Sub Team Member
• 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   Sept. '18 to Dec. '18
Automation Controller/Access Analyst
• Created a database in Access using **SQL** and **VBA** 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   Jan. '18 to Apr. '18
Application Developer
• Developed a web application using **HTML**, **CSS,** and **JavaScript (BootStrap)** to display information
• Created **Java** classes for the **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 data from the alpha vantage API, in **Jupyter Notebook** 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 information about the weather and selected subreddits

PDF Data Mining and Budgeting Analysis Script
• Mined data from banking PDFs using **Regex** and then organized it into a **Pandas** data frame
• Data cleaned and processed using **TFIDF** and **Vectorization** on names to be able to predict expenditures category in **Jupyter Notebook**
• Predicted an expenditure's category with **Random Forest Classifier** and analyzed using **Matplotlib** and summations for personal budgeting

Internet Traffic Analysis and Organization
• Designed 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 a **DecisionTreeClassifier** model

Education

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