Angad Singh

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I am a software developer with 3 years of experience with an interest in areas such as back-end development and machine learning.

Technical Skills

Languages:	Python (Experienced), SQL (Experienced), JavaScript (Proficient), C/C++ (Proficient), C# (Proficient), Bash (Proficient), Java (Prior Experience), MATLAB (Prior Experience)
Frameworks/ APIs:	Numpy (Experienced), React (Proficient), Node.js (Proficient), Bootstrap (Proficient), Flask (Proficient), Pytorch (Prior Experience)
Platforms:	Linux, Microsoft Server, Docker, Heroku

Work Experience

Software Developer | Bell Canada **June 2020 – Current**

- Developed dashboards to display competitor mobile network speeds across Canada using Python Dash, Flask, MariaDB, Elasticsearch and Hadoop.
- Utilized the Slack API to create detailed alerts on market changes of competitors.
- Scrapped webpages to get information about incoming competitor site request, using selenium.
- Utilized the Atlassian suite (JIRA, Confluence) to maintain clear communication with team members.
- Technologies: Python, Flask, HTML/CSS, SQL, Docker, Git

Technical Application Analyst | Tata Consultancy Services **Feb 2019 – May 2020**

- Develop queries and scripts to give accurate reports of potential fraudulent transactions or missing transactions to assist with the development of the application.
- Collaborate with other teams to organize major upgrades in order to improve the system performance.
- Support production environment and resolved any failures or memory issues to ensure that the application was preforming as expected.
- Technologies: Bash, PowerShell, SQL, Hadoop, DB2, Apache NiFi

Project Engineer | Evertz Microsystems **May 2018 – Jan 2019**

- Automated the pre-possessing and transcoding of assets so that our customers were able to distribute videos to their respective clients.
- Developed the primary scripts for NBCU's non-linear delivery of assets to media service providers to transfer assets to various locations using different transfer methods, such as Signiant and Faspex.
- Refactored SQL queries and reduced run time of existing queries by 50%, in order to improve migration to a new DBMS (MariaDB).
- Technologies: JavaScript, Python, SQL, DB2, MariaDB, Git

Personal Projects

PS5 Web scraper | Selenium, Python, HTML **Mar 2021 – May 2021**

https://github.com/singha95/PS5Webbot

- Utilizing the Twitter API in order to create a determine when retailers would have PS5 in stock.
- Automate the login, purchasing for specific retailers.
- Scrapped retailer's websites to automate the purchase of the PS5 using Selenium.

Conky Stock Price | C++, Python **Jan 2020 – Mar 2020**

https://github.com/singha95/GetStockPrice

- Created various terminal tools to retrieve stock data from yahoo finance. Allows users to quickly retrieve stock details from the terminal.
- Created scripts for users to use these scripts along with Conky to set their background with update to date stock prices.
- Utilized the curl C++ library to parse the information directly from the Yahoo finance website.
- Created Python scripts to get monthly and weekly graphs of prices for stocks.

MLB Analytics | JavaScript, Bootstrap, React, Node JS **Aug 2019 – Sept 2019**

https://github.com/singha95/mlb_analytics

- Utilized the MLB Stats API to create an interactive web app that will display stats and rosters for the different MLB teams.
- Users can search for players and get statistics such as batting average.
- Deployed the web app using Heroku. (https://mlb-player-analytics.herokuapp.com/)
- Implemented support for mobile devices to ensure that the app is compatible with multiple devices.
- Preformed user testing to receive feedback to help make the UI more engaging and easier to use.

Research Project

Creative Flow+ Dataset | MATLAB, Python, Bash **Sept 2017 – Jan 2018**

http://openaccess.thecvf.com/content_CVPR_2019/papers/Shugrina_Creative_Flow_Dataset_CVPR_2019_paper.pdf

- Developed an optical flow dataset like the MPI Sintel Dataset using the Blender Python API.
- Users would be able to create their own datasets with different stylized effects. This data set can then be used with existing optical flow algorithms as training data or to test how well the algorithm generalizes.
- Developed scripts in bash that would help users automate the process of rendering batches of Blender objects.
- Developed scripts using the Blender API to randomize the camera placement in the scene in order to increase the size of the dataset.
- The project was published as a part of the 2019 IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) under the title of Creative Flow+ Dataset.

Education

Honors Bachelor of Science, Specialist in Computer Science

University of Toronto

Focus in Artificial Intelligence