ABHJITH **RAMALINGAM**

Passionate about Data Analytics, Robots and Software Engineering.

Website : abhijith1995.github.io
GitHub : github.com/Abhijith1995
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SKILL SET

PROGRAMMING

General

Java | Python | C# | C++

Front End

HTML | CSS | JavaScript

TOOLS

Libraries/Frameworks

jQuery | AngularJS | Flask

Testing Tools

Protractor | Karma | Jasmine

Database

MySQL | PostgreSQL | MongoDB

DATA ANALYSIS

R | Pandas | Numpy | SciPy | MapReduce | Hadoop | Matplotlib | Scikit-learn | Machine Learning | Statistical Inference | D3.js

EDUCATION

UNIVERSITY OF WATERLOO

BASc in Mechatronics Engineering
Expected Graduation: May 2018

DUBAI MODERN HIGH SCHOOL

Graduated in 2013 with an average of 97.75%

RELEVANT COURSES

At University

Calculus for Engineers
Linear Algebra for Engineers
Experimental Measurements and Statistical Analysis (ongoing)
Data Structures and Algorithms

Certificates from online courses

Intro to Financial Accounting
Computational Investing
R Programming
Exploratory Data Analysis
Getting and Cleaning Data
Data Scientist's Toolbox

Audited courses

Intro to Machine Learning
Intro to Data Science
Intro to Hadoop and MapReduce
Machine Learning

WORK EXPERIENCE

JavaScript Developer — HubHead

Sep-Dec 2014 | Markham,ON

- Managed automated test suites using a continuous integration server.
- Wrote browser automation scripts to perform unit and end to end tests.
- Wrote bug fixes for UI issues and improved user functionality.
- Engaged in the SDLC using agile methodologies to build a scalable cloud-based data quality solution.

Technologies used : JavaScript | AngularJS | Git | Karma | Protractor | Jasmine | Jenkins

R&D Team Member — protecode

Jan-April 2014 | Ottawa,ON

- Developed web crawlers to download over 75,000 projects into a relational database from code hosting websites like Github and SourceForge.
- Optimized the SQL queries of an internal data mining tool, thereby improving proccessing time by 25%.
- Migrated internal company databases by writing maintainable data-acquisition software services.

Technologies used : C# | .NET Framework | MySQL | PostgreSQL | Linux | MS Excel | RegEx | SVN

</> PROJECTS

Market Simulator

- Built a stock market simulator by accessing historical stock data from Yahoo Finance API.
- Analyzes a given portfolio's performance by simulating stock trades over a fixed time period
- Applications include performance evaluation of algorithmic trading stratergies and portfolio management.

Technologies used : Python | Pandas | SciPy | Numpy | Matplotlib

New York Subway Data

- Accessed New York Subway data from external APIs to discover interesting patterns and trends.
- Applied statistical analysis techniques, machine learning, and MapReduce to mine a large data set.
- Used visualization libraries to better understand a complicated data set.

Technologies used : Python | Pandas | SciPy | Scikit-Learn | Numpy | HTTP | Matplotlib

TransitCheck

- Worked as pair programmer to build the front end for a web application which alerts TTC users of situational delays.
- Built a web crawler to programatically acquire information about TTC services which was then stored in a NoSQL database for fast retrieval.

Technologies used : HTML/CSS | JavaScript | Node.js | Java | MonogoDB | Bootstrap

Braillestorm

- Won a National Robot Olympiad by building and programming a robot with an easy to use interface for visually impaired people to print Braille.

Technologies used : LEGO Mindstorms | C++

Robotic Turret

- Constructed a small robotic turret which automatically shoots small projectiles at nearby targets.
- Built a simple remote control interface to allows users to manually control the robot.

Technologies used : LEGO Mindstorms | C++

Mathematical Art

- Applied various trignometrics equations to generate beautiful figures using only straight lines

Technologies used : HTML Grahpics Libraries | JavaScript

Easy LinAlg Solver

- Implemented the algorithm used to reduce a matrix into it's reduced form through an easy to use webpage

Technologies used : jQuery | JavaScript