ABHJITH **RAMALINGAM**

Passionate about Data Analytics, Robots and Software Engineering.

◑ Website : abhijith1995.github.io
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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%

★ COURSEWORK

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 online courses

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

💼 WORK EXPERIENCE

JavaScript Developer

Sep-Dec 2014 | Markham,ON

⚒ HubHead

- 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 cloud-based data quality solution.

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

R&D Team Member

Jan-April 2014 | Ottawa,ON

protecode

- 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 a 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 strartegies 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, visulaization libraries and MapReduce to mine and understand a large data set.

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

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 routinely 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

- Lead a team which 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`