Abhijith Ramalingam

www.abhijith.info

SKILLS

PROGRAMMING

Java • Python • JavaScript • Ruby C# • C/C++ • MATLAB

WEB TECHNOLOGIES

HTML/CSS • Bootstrap • jQuery Angular • Socket.io • Node.js • Rails

DATABASE

MySQL • Redis • MongoDB

DATA ANALYSIS

Numpy • Scipy • Scikit-learn Pandas • Matplotlib • R • Hadoop

EMBEDDED SYSTEMS

Arduino • PLC • FPGA

OTHER

Linux • Windows • Git • Eclipse

WANTS TO LEARN

Computer Vision • Distributed Systems Artificial Intelligence • Deep Learning

EDUCATION

UNIVERSITY OF WATERLOO

BASc in Mechatronics Engineering Expected May 2018 | Waterloo, ON Cumalative GPA: 85%

DUBAI MODERN HIGH SCHOOL

Grad. March 2013| Dubai, UAE Grade 12 Average: 97.75%

COURSEWORK

AT UNIVERSITY

Statistical Analysis
Data Structures and Algorithms
Real Time Systems (ongoing)
Linear Systems and Signals (ongoing)

CERTIFIED 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 Hadoop and MapReduce Machine Learning

EXPERIENCE

INTERNATIONAL FINANCIAL DATA SERVICES

R&D Developer

April 2015 - Aug 2015 | Toronto, ON

- Worked within applied analytics on a big data engine to reduce large datasets by up to 20% by applying transformation rules using Hadoop and Rails
- Developed a GUI and classifier in Python that uses SVMs and Naive Bayes algorithms to authenticate clients using ECG data from a Nymi Band
- Built a web based image viewer with **Node.js** ,**Socket.io** and **Bootstrap** to enhance user productivity with features like savable snippets, OCR and real-time heatmaps

HUBHEAD CORP

JavaScript Developer

Sep 2014 - Dec 2014 | Markham, ON

- Detected bugs by managing automated test suites on a **Jenkins** server
- Performed end to end and unit tests on a cloud product by writing browser automation scripts using **Angular.js** ,**Protractor** and **Selenium**
- Engaged in the SDLC using an agile approach to build a data quality solution

PROTECODE INC

R&D Team Member

January 2014 - April 2014 | Ottawa, ON

- Downloaded over 120,000 projects into a MySQL database from websites like Github and SourceForge by writing web crawlers in C#
- Optimized SQL queries of an internal data warehousing tool in C# which lead to a 25% reduction in project processing time
- Migrated internal company databases by writing data-acquisition software

PROJECTS

CRIB Full Stack Developer

June 2015

 Built entirely at AngelHack, Crib is a chat application integrated with a real time poll for users to discuss housing options using Ruby on Rails and Web Sockets

POTENTIOMETER

Algorithms Developer

March 2015

- Calibrated an Infrared sensor using an **Arduino** and **Python** to measure small distances as part of a statistics course project
- Used Polynomial Regression and Nearest Neighbor Search to train a data model to calculate distances, thus reducing maximum uncertainty to 0.15 cm

MARKET SIMULATOR

Developer

Oct 2014 - Nov 2014

- Developed a **Python** program that accepts trade orders for stocks at past dates to calculate profit using data from **Yahoo Finance API**
- Implemented investment strategies like Bollinger Bands which look for fluctuations in stock prices to generate trade orders
- Applied the **K-Means clustering** method to visualize data distribution and improve performance of trading algorithms