Akshay Bhatia

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EDUCATION:

Rutgers University, New Brunswick, NJ

Sept 2016 - May 2018

Master of Science in Computer Science

Relevant Courses: Data Structures and Algorithms, Software Engineering of Web Apps, Artificial Intelligence,

Text Mining and Big Data Analytics, Database Systems Implementation

University of Mumbai, Mumbai, India

Aug 2012 – May 2016

Bachelor of Engineering in Information Technology

Relevant Courses: Object Oriented Programming, Operating Systems, Data Mining and Business Intelligence,

Software Project Management

TECHNICAL KNOWLEDGE:

Programming Languages: Java, Python, C, C#, JavaScript, PHP

Databases: MySQL, PostgreSQL, MongoDB, SQLite, Oracle

Frameworks and Tools: Django, Android SDK, NodeJS, AngularJS, numpy, pandas, Jira

Big Data / Machine Learning: Apache Spark, Hadoop, AWS, Google Cloud Platform, Keras, Tensorflow

WORK EXPERIENCE:

Rutgers University, New Brunswick, NJ

Jan 2017 – May 2018

Teaching Assistant / Part Time Lecturer (CS110: Introduction to Computers and their Applications)

- · Conducted weekly recitations for over 100 students and proctored exams for CS 110
- · Rated excellent in terms of overall teaching effectiveness by almost 90% of the students

ESocietyBill and Management Services LLP, Mumbai, India

May 2014 – July 2014

Application Developer Intern

- · Developed an Android application to aid housing communities in Mumbai
- · Created an intuitive User Interface and designed modules to interact with REST services and fetch JSON data
- · Launched the application on Google Play Store

Suven Consultants and Technology Pvt. Ltd, Mumbai, India

Dec 2013 - Jan 2014

Web Developer Intern

- Developed a fully functional e-commerce web application using HTML5 / CSS3, PHP, JavaScript, jQuery, AJAX and MySQL
- · Designed dynamic modules and also integrated payment methods for purchases
- · Received "Web Technologist Level 1" certification from Monster India

PROJECTS:

Path finding and Collision Detection in Virtual Environment (Python, numpy)

Nov 2017- Dec 2017

- Implemented the Rapidly exploring Randomized trees algorithm for driving a polygonal robot from a start point to an end point in a virtual grid containing virtual obstacles and visualized the virtual environment using matplotlib
- · Discovered an optimal path by combining the algorithm with common graph searching techniques like Breadth First search
- · Tested the algorithm for various start and end points and achieved about 95% accuracy

Stock Market Analysis and Prediction Tool (Python, Django, PostgreSQL, Bootstrap, CoffeeScript)

Jan 2017 - May 2017

- · Designed a web-based application to help users in buying/selling stocks
- · Developed a dashboard that presented users with real-time and historical information of stocks of various companies
- Predicted trends of stock prices using machine learning techniques such as Bayesian curve fitting, support vector machines and Artificial Neural Networks

SimpleDB (Java) Oct 2016- Nov 2016

- Implemented 3 joining algorithms in SimpleDB, a Java-based database management system namely Simple Nested Loop, Page Nested Loop and Sort Merge Join
- · Implemented the BufferPool class for caching pages and HeapFile access method to read/write data on disk

Predictive and Corrective Text Input for Desktop Editors (Java)

Aug 2015- May 2016

- · Designed a text editor for Windows that facilitated next word prediction and autocorrect functionality
- · Implemented suffix trees to optimize storage of words and utilized Google's n-grams and frequency analysis for word prediction