

Akshay Bhatia

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Education:

MASTER OF SCIENCE | MAY 2018 | RUTGERS UNIVERSITY, NEW BRUNSWICK, NJ

- Major: Computer Science
- Relevant Courses: Data Structures and Algorithms, Artificial Intelligence, Database Management Systems Implementation, Text Mining and Big Data Analytics, Computational Robotics, Software Engineering of Web Apps

BACHELOR OF ENGINEERING | MAY 2016 | SARDAR PATEL INSTITUTE OF TECHNOLOGY, MUMBAI, INDIA

- Major: Information Technology
- Relevant Courses: Object Oriented Programming, Structured Programming Approach, Advanced Internet Technology, Distributed Systems, Operating Systems, Software Project Management, Data Mining and Business Intelligence

Experience:

PART TIME LECTURER | RUTGERS UNIVERSITY | JANUARY 2017 – PRESENT | NEW BRUNSWICK, NJ

- Conducted weekly recitations for the course CS 110: Introduction to Computers and their Applications in Spring and Fall semesters and evaluated the performance of over 100 students
- Rated excellent in terms of teaching effectiveness by more than 70% of the students in the Student Instructional Rating Survey at Rutgers

ANDROID APPLICATION DEVELOPER INTERN | GRUH MAINTENANCE AND BILL PAY CORPORATION PVT. LTD. | MAY 2014 – JULY 2014 | MUMBAI, INDIA

- Developed an Android application to aid in administrative operations of housing societies in Mumbai
- Created an intuitive User Interface and designed multiple modules to interact with REST services and fetch data in JSON format
- Launched the application on the Google Play Store ([link](#))

Projects:

EXPERIMENTS WITH REDDIT COMMENTS | 2017 | Python, Apache Spark, Google Cloud Platform

- Analyzed one month of Reddit comments using Apache Spark and trained a LSTM recurrent neural network on data from specific subreddits in order to predict comments using deep learning strategies
- Visualized the data in Apache Spark and found interesting insights, such as the presence of cliques in subreddits and relation of comment length to score.

PATHFINDING AND COLLISION DETECTION IN VIRTUAL ENVIRONMENT | 2017 | Python

- Implemented the Rapidly-exploring Random Trees (RRT) algorithm in order to find a path between two points in an environment and developed collision detection techniques to avoid obstacles in the environment
- Improved the algorithm for use with polygonal robots in the environment and found an accurate collision free path using less than 500 random samples

STOCK MARKET ANALYSIS AND PREDICTION TOOL | 2017 | Python, Django, MySQL, CoffeeScript, Bootstrap

- Developed a web based application which presented users with a dashboard to buy/sell stocks
- Applied Machine Learning techniques such as Bayesian Curve Fitting, Artificial Neural Networks and Support Vector Machines to historical and real-time data of various stock prices and predicted whether stock of a particular company should be bought or held or sold.

PREDICTIVE AND CORRECTIVE TEXT INPUT FOR DESKTOP EDITORS | 2015-2016 | C#

- Developed an improved text editor for Windows machines using Visual Studio(C#)
- Implemented suffix trees and utilized n-grams and frequency analysis to facilitate word prediction
- Authored and presented a technical paper regarding the same at the *International Conference on Advances in Human Machine Interaction*, 2016 which was published in the IEEE Xplore Digital Library

Technical Skills:

Operating Systems: Windows, Linux

Programming: Python, Java, C, C#, HTML/CSS, JavaScript, PHP

RDBMS: Oracle, MySQL, PostgreSQL, SQLite

Others: Django framework, Android SDK, Amazon Web Services(AWS), Google Cloud Platform, Apache Spark