# **AMIT SHAH**



## **OBJECTIVE:**

Diligent Computer Science enthusiast looking to solve challenging problems in your firm through a Software Development opportunity.

#### **EDUCATION:**

MS in Computer Science at Rochester Institute of Technology (R.I.T.), NY

(Expected) May 2018

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GPA: 3.7

**Courses:** Foundations of Algorithms, Distributed Systems, Web Services, Big Data Analytics, Advanced Object Oriented Programming Concepts, Foundations of Computer Vision.

B.E. Information Technology at L.R Tiwari College of Engineering, Mumbai, India

June 2014 GPA: 3.6

Courses: Data Structures and Algorithms, Object Oriented Analysis and Design, Software Engineering.

### **SKILLS:**

Programming Languages: Java, Python, C#, JavaScript, WPF, MATLAB, C++, C, Android.

Web & Database Technologies: HTML/CSS, Node.js, Cassandra, MongoDB, JSP, SQL, MS Excel, Tableau.

Operating Systems: Windows, Linux, Mac OS.

## INDUSTRY EXPERIENCE:

Software Developer Co-op at Alstom, Rochester

Sep 2016 - Dec 2016, June 2017 - August 2017

- Worked on a standalone desktop application in C# & WPF to create a simulation of trains crossing tracks.
- Fixed issues in the current software application by extensive research and performed code optimization.
- Adopted Singleton pattern and Abstract Factory Pattern to ensure the code cleanliness and efficiency.
- Implemented an object-oriented approach in constructing the entire application.
- Developed scripts in **IBM DOORS** for requirement management to automate deliveries and to create KPI's.

## Web Developer Intern at RIT School of Math, Rochester

Jun 2016 - Aug 2016

- Developed **interactive** web-based **JavaScript** programs to illustrate concepts of cardiac arrhythmias.
- Created a graph plotting mechanism which was used to plot many graphs throughout the project.
- Used **Node.js** framework to compile code, export modules that were created within pages for reusability.
- Adopted **Jekyll** service to render the project on the website using GitHub pages.

## Associate Business Analyst at Hansa Cequity, Mumbai, India

Jul 2014 - Jul 2015

- Developed and Implemented statistical models for customer retention, churn prediction, up/cross-sell, customer lifetime value using predictive modelling techniques.
- Extracted data to execute targeted campaigns, developed insights by analysing past data, used insights to improve customer retention rate (by up to 5% of 2 million at times) and created business model for clients.
- Performed **Market Basket Analysis** to identify products which are likely to go together and create opportunities for targeted campaign.
- Diligent scrutiny of potential problems, followed by investigation for inconsistencies in data or processing and resolving the problem using accurate solution.
- Automated the daily and weekly report processes using **SQL Procedures**.

### **PROJECTS:**

## Social Networking Cloud Application (Java, JSP, Cassandra, Docker)

- Designed a Facebook-like cloud application built on Docker and hosted its data on Cassandra cloud.
- Performed load balancing by distributed hashing and Round-robin.
- Achieved Fault tolerance by replication and constantly monitoring the system via heartbeat.

#### Query Engine (MongoDB, Node.JS, JavaScript, HTML)

- Built a web-based query system based on MongoDB database to extract data for web services.
- Used Node.js to query MongoDB using user-specified keywords and filters, host data on a RESTful API.

## Distributed System File Search and Replication. (Java)

- Implemented the Distributed hash table and enabled user-selected File Insertion in constant time.
- Designed a system for File Search in a Distributed environment in logarithmic time through hashing.
- Monitored the file requests and cached the file to servers if it was popular.

## Movies Near You (HTML, JavaScript, RESTful API)

- Developed a web-app to display list of real-time movies in theatres, their trailers, IMDB rating.
- Consumed RESTful API's to include feature to book tickets in theatres based on user's location.
- Used JavaScript to guery and parse real-time JSON data and to create a GUI.

### **Connect Four Game: (Java)**

- Created a simulation of the Connect Four game using the MVC Architecture.
- Added functionality to play the game Single Player, Multiplayer or on network with TCP/IP, RMI and UDP.

## Diabetic Patient Data Analysis: (WEKA, Python)

- Performed data cleaning by eliminating outliers, filling in missing values, binning & discretization.
- Performed classification by using **J48** decision tree, **InfoGain**AttributeEval in Weka to classify data and construct model for prediction.