Arjun Sharma

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EDUCATION

North Carolina State University, Raleigh NC

Master's in Computer Science.

Sardar Patel Institute of Technology (SPIT), Mumbai

June 2015

Expected: May 2019

Secured a Bachelor of Engineering in Computer Engineering.

Courses: Design and Analysis of Algorithms, Object-Oriented Design and Development, Distributed Computing, Automated Learning and Data Analysis, Advanced Data Structures, Database Management System, Data Intensive Computing.

PROFESSIONAL EXPERIENCE

IBM, Raleigh February 2019 – Present

Software Developer Co-Op Shutterfly Inc., California

May 2018 – August 2018

Software Engineer Intern

- Worked with Data Architecture team with focus on building scalable data pipelines to process Shutterfly's image and
 user data to help business make data driven decisions
- Implemented a process to extract and transform information about user created personalized projects which helped the data science team to train their recommendation models better.

JP Morgan Chase & Co., Mumbai

July 2015 – June 2017

Software Engineer

- Developed a Java based web application integrated with Hadoop and deployed on an ABB Cloud Server that provides Operational users informational views and access to relevant tools and reports to streamline activities.
- Designed an extensive rich presentation layer and GUI framework using HTML, CSS, Sencha ExtJS, and AJAX.
- Implemented an Asynchronous Task Framework with Queues and Thread Pools to execute resource intensive tasks.
- Spearheaded the use of SonarQube platform for analysing code quality and fixing bugs, logical errors and vulnerabilities.
- Created UNIX wrapper scripts to run the deployed Ab-Initio code (graphs and plans) and Schedule jobs using Control-M.
- Automated a module using Java to eliminate manual work involved in migration and generation of EME objects.
- Implemented an offline caching feature using SyncManager, Android and Retrofit libraries, providing mobile application to run in a standalone mode and later upload the data once it is connected to the Internet.

TECHNICAL SKILLS

Programming Languages: Java, Ruby, C, C++, Python, SQL, Bash Scripting.

Web Technologies: JavaScript, ExtJS, JSP, Servlets, AJAX, JQuery, Spring MVC, Rails, RESTful API.

Databases: Oracle, MySQL, Postgres, SQLite, Teradata.

Big Data Ecosystem: Hadoop, HDFS, MapReduce, Hive, Sqoop, HBase, Apache Flume, ZooKeeper.

Cloud Platform: Heroku, Amazon Web Services (EMR, EC2, S3, Kinesis, DynamoDB, Athena, Data Pipeline)

Technologies: Git, Subversion, Android SDK, Avro, Parquet, Control-M, UC4, Terraform, CloudFormation, Jenkins

ACADEMIC PROJECTS

Stock Prediction Using Twitter Sentiment Analysis

• Performed real-time sentiment analysis of large volume and variety of data using Apache Flume, MapReduce, Hive and predicted stock prices using Rule-Based Model.

Distributed Scoreboard

• Developed a distributed scoreboard using ZooKeeper coordination service that displays and updates N most recent and top scores for multiple players for a game real-time.

Open Source Contribution – 'Expertiza'

• Implemented the prototype design pattern for functionality of importing the teams of students signing up for a given assignment of a course using RoR, SOLID principles for better architecture and Docker to setup the environment.

Buffer Management in SimpleDB

• Implementation of Least Recently Used page replacement policy and a Map Data Structure to manage buffers and block allocations in Java for SimpleDB.

In-Memory and External Disk File Access Patterns

• Implemented and analysed in-memory and external disk file access patterns using different data structures (B-Trees, Hashing, and K-d trees) for an efficient search and retrieval of records.

Mobile Application Development – 'Make Soil'

• Developed cross-platform app for Android and iOS using React Native, and Firebase for authentication and data storage.

HONORS & ACTIVITIES

- Technical Lead of Institute of Electrical and Electronics Engineers (IEEE), SPIT Student Chapter, Mumbai.
- Finalist in "TAP Training Project" 2015 challenge conducted by J.P. Morgan Chase, Mumbai.