Arjun Sharma

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EDUCATION

North Carolina State University, Raleigh NC   **May 2019**
Master's in Computer Science.

Sardar Patel Institute of Technology (SPIT), Mumbai   **June 2015**
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 – May 2019**
Software Developer Co-Op
- Automated the generation of Inventory Recon Tracking report based on vulnerability and severity using Java.
- Designed and Implemented slack based chatbot using Watson assistant and conversation services to support security tooling and conceptual FAQs based on Security Operations runbook, WCP Security Policy, and ITSS.

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.
- 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.
- 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.