

## RADHIKA JOSHI

Milpitas, CA 95035 | (510)513-2124 | radhika7002@gmail.com | [LinkedIn](#) | [Portfolio](#) | [Github](#)

### EDUCATION

**Santa Clara University**, Santa Clara, CA  
Master of Science in Computer Science and Engineering  
GPA: 3.5/4.0

Fall 2022 - June 2024

**University of Pune**, Maharashtra, India  
Bachelor of Engineering in Computer Engineering  
GPA: 3.7/4.0

May 2018

### KEY COURSEWORK

Advanced Web Programming, BigData, Machine Learning, Artificial IntelligenceI, Advanced Database Systems, Operating Systems

### TECHNICAL SKILLS

**Languages:** Java, JavaScript, Python, C++, HTML5, CSS, Bootstrap, XML, Ruby

**Databases:** MongoDB, MySQL, Oracle, Teradata, Firebase

**Frameworks:** SpringMVC, SpringBoot, React.js, ExpressJS, NodeJS, Spark, Kafka, HDFS, MapReduce, Cucumber, Ruby on Rails

**Tools:** GitLab, GitHub, SOAPUI, POSTMAN, SQLDeveloper, Splunk, Maven, Gradle

### PROJECT EXPERIENCE

#### Big Data analysis for Streaming Web Server Log Data

2023

(Kafka, Spark, Spark Streaming, Hadoop, Java, Python)

- Developed a big data pipeline for 1M records where Kafka Producer creates a topic from a web server log file and the structured streaming data from the topic is consumed by Spark consumer. Performed Spark transformations and exploratory data analysis(EDA) on the streaming data and stored the analysis results in HDFS using Parquet file format.
- EDA results provided insights into error rate per endpoint. This allows for timely identification of service failures.
- Additionally, services that frequently transmit large content sizes were identified to better distribute existing resources in the cluster and improve application performance.

#### Image Gallery

2023

(ReactJS, JavaScript, HTML5, CSS, Bootstrap, Cloud Firestore, Firebase)

- Implemented key features such as creating a bucket to store user-uploaded images, user profile management, search & filtering capabilities and handled user authentication. Implemented client-side routing using React-Router V6, used Cloud Firestore database as data store and deployed the application using Firebase Hosting.

#### Ecommerce and Video Library Application for Gardening

2021

(MongoDB, ExpressJS, ReactJS, NodeJs, JavaScript, HTML5, CSS, Bootstrap)

- Developed an ecommerce application with key features of user registration, login, add & remove products from cart, edit item quantity, sorting, filtering and adding to favourites. Built a video library with functionalities such as create, display and delete playlist, add/delete from playlist, add to watch later & mark as favourite.

#### Database System Project

2022

(C++)

- Built a database engine on C++, which executed queries to the local disk from the CLI.
- Database layers & modules developed: file system handler, page handling, index creator and query engine.

### WORK EXPERIENCE

**DBIS Lab, Santa Clara University, CA**

July 2023 - Present

Research Assistant

- Compared popular Big Data Management Systems on query scheduling and resource management techniques to identify current challenges and enhancement opportunities. Submitted a vision paper to the IEEE Big Data Conference 2023.

**TIAA-GBS, India**

July 2018 - April 2022

Software Engineer

- Contributed to a JAVA based service to abstract customer communication tools from all TIAA financial products, resulting in better communication experience and 60% improvement in operational efficiency through unified monitoring and alerting.
- Worked on a RESTful service to trigger ETL pipelines for pre-processing and storing communications preference data.
- Worked on a real time communication preference update feature that led to 20% decrease in the communications volume.
- Worked on a data monitoring system to track changes in user subscription preferences and send alerts when it led to email volume change beyond a certain threshold. This provided business with valuable insights into impact of customer decisions and helped identify and fix bugs in the ETL pipeline.

### PUBLICATIONS

(Python, Matplotlib, Twitter APIs, Deep Learning, Sentiment Analysis)

2018

Filed a patent on Sarcasm Detection on Hindi Devanagari Script using LSTM-RNN artificial neural networks, pending approval.