(509) 637-6626 sjoshi48@asu.edu

**EDUCATION** 

Tempe, AZ

 $\rightarrow$  Arizona State University

Master of Science in Computer Science (GPA: 4.0 / 4.0)

January 2021 - December 2022

→ Nirma University

Ahmedabad, IN

Bachelor of Technology in Information Technology (GPA: 7.9 / 10)

July 2016 - June 2020

**EXPERIENCE** 

# **Enterprise Marketing Hub at Arizona State University**

Tempe, AZ

Web Development Assistant (Part-time)

May 2021 - Present

Collaborating with the web development team for managing 20 plus websites for Arizona State University. Duties include building web pages and content updates, coding and debugging in JavaScript and PHP, migrating websites from older versions to newer ones, creating data reports for the entire software engineering cycle.

# Stallion Archisys Ltd.

Ahmedabad, IN

Software Development Intern

January 2020 - July 2020

- Worked on developing a python based web application for an online grocery store. Developed the backend of the application with Python's Django & Django rest framework which was connected to the Oracle SQL database. The frontend is implemented using HTML, CSS, Bootstrap, ReactJS with the Model-View-Controller architecture.
- Implemented multilingual search for the products using transformer neural networks. It supports all local languages.
- Designed a deep-learning-based product recommendation engine that uses an Auto-encoder neural network to generate recommendations for the user based on the purchase/search history. Achieved a hit ratio of 90 %.
- It also provides sequential recommendations through an LSTM neural network that models the timely trends of the user's purchase habits. These models were coded in Python's Keras framework and deployed to AWS sagemaker.

# Stallion Archisys Ltd.

Ahmedabad, IN

Software Development Intern

May 2019 - July 2019

- Leveraged python's multithreading paradigm to create a web scraping system for the company's Email marketing campaign. The system scraps the webpages parallelly. Each thread handles approximately 50 web pages.
- Scraping is done using the python-based Beautiful Soup and Selenium frameworks. Collected data is processed and stored using the Pandas framework. This caused a 25% increase in the marketing team's reach.
- Created a centralized logging system that accumulates the logs generated by all the software currently in the development phase on the organization's distributed computer network. The logs from each system of the company are dumped to a local server using cron jobs and processed at a rate of 5000 log entries every hour.
- Devised a web application using Python's Flask and Node is backend that provides centralized access to these logs and accurate visualization dashboards after analysis. This reduced the debugging time by 40%.

**PROJECTS** 

# Netflix Movie Recommender System

April 2021

Keywords: Angular.js, Node.js, MongoDB, Mongoose ODM, REST API, Authentication, JSON Web Token

Designed a web application for a movie recommendation engine on the Netflix movies dataset. The frontend of the application was developed using Angular is and the backend using Node is. Developed RESTful APIs for creating the url endpoints and for managing the CRUD operations on a MongoDB database. Created templates for the pages using handlebars and implemented user authentication and authorization using JWT.

# Safety Helmet Detection System

November 2019

Keywords: Python, Deep Learning, Computer vision, CNN, Keras, OpenCV

Worked on the computer vision aspects of deep learning to design an automated system that generates a violation ticket for workers of the construction site who are working without wearing safety helmets. This is accomplished by passing the CCTV video to a convolutional neural network developed using the Keras framework. Image processing is done using OpenCV. The model is trained on the state-of-the-art YOLO v3 architecture and achieved a mean average precision (mAP) of 85 %.

#### **SKILLS**

- Languages: C/C++, Python, Java, JavaScript, HTML5, CSS3, Saas, Ajax
- Coursework: Operating Systems, Data Communication Networks, Advanced Networking and Communication Protocols, Object-Oriented Programming, Data Structures, Database Management Systems, Software Engineering, Foundation of Algorithms, Machine Learning, Deep Learning. Distributed Database Systems. **Frameworks:** React, Node.js, Angular.js, Django, Flask, Pandas, Selenium, Scipy, Keras, Spark, Hadoop.
- Tools: Git, Github, Jira, AWS, Docker, Heroku, GraphQL, Oracle SQL database, MongoDB, PostgreSQL.