
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 - May 2020*

- Worked on developing a python based web application for an online grocery store. Developed the backend of the application with the Django & Django rest framework connected to the Oracle database. The frontend is implemented using HTML, CSS5, Bootstrap, React.js.
- 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 that loads the URLs of multiple web pages for the marketing team's Email campaign, scraps them parallelly, retrieves the information, stores the data in structured form after cleaning it. Each thread could handle approximately 50 web pages.
- Scraping is done using the python-based BeautifulSoup 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 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 that provides centralized access to these logs and accurate visualization dashboards using Python's Flask framework after analysis. This reduced the debugging time by 40%.

EDUCATION

→ Arizona State University

Tempe, AZ

*M.S. in Computer Science (GPA : 4.33 / 4.0)**January 2021 - December 2022***→ Nirma University**

Ahmedabad, IN

*B. Tech. in Information Technology (GPA : 7.9 / 10)**July 2016 - June 2020*

PROJECTS

Distributed Database Query Processor*April 2021**Keywords: Python, PostgreSQL, Distributed database systems, fragmentation*

- Designed a python based query processor for a distributed database using pycpg2. The system performs horizontal and vertical fragmentation of the database tables and facilitates CRUD operations on the appropriate fragment. It also does parallel sort and parallel join operations on multiple fragments of the database.

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 safety helmets. This is accomplished by passing the CCTV video to a convolutional neural network developed in Keras frameworks. 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:** Python, Java, JavaScript, HTML, CSS
- **Coursework:** Object-Oriented Programming, Data Structures, Database Management Systems, Software Engineering, Foundation of Algorithms, Data Mining, Information Retrieval Systems, Machine Learning, Deep Learning, Distributed Database Systems.
- **Frameworks:** Pandas, Selenium, Django, Flask, Scipy, Keras, Matplotlib, Seaborn.
- **Tools:** Git, Github, Jira, AWS, Heroku.