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EXPERIENCE

Stallion Archisys Ltd.
Ahmedabad, IN
Machine Learning Intern — *Jan 2020 - Apr 2020*

- Worked on developing a web application for an online grocery store.
- Designed a deep-learning based product recommendation engine which uses an Auto-encoder neural network to generate relevant recommendations for the user based on his/her purchase/search history. Achieved a hit-ratio of 90 %.
- It also provides sequential recommendations through a LSTM neural network that models the timely trends of the user's purchase habits.
- Developed Django APIs that work in the back-end with the trained models to generate recommendations.

Stallion Archisys Ltd.
Ahmedabad, IN
Python Developer Intern — *May 2019 - July 2019*

- Designed a fully functional web scraping system, that loads the URLs of the websites to be scrapped, performs parallel scraping through python's multithreading paradigm and stores the results after necessary processing.
- Scraping was done using the python-based BeautifulSoup and Selenium frameworks. Scraped data was processed and stored using the Pandas library.
- Developed a centralized logging system that keeps a track of the logs generated by all the software currently in the development phase of the organization.
- The logs from each system of the office are dumped to a local server using cron jobs and are later visible through a locally hosted Flask-based web application that provides centralized access to these logs.

EDUCATION

→ Nirma University
Ahmedabad, IN
B-Tech. in Information Technology (GPA : 7.86 / 10) — *July 2016 - May 2020*

PROJECTS

→ Task Manager Application
June 2020

Keywords : MongoDB, Mongoose ODM, REST API, Authentication, JSON Web Token

- Designed a task manager application with Javascript in a Node.js environment which is connected to a MongoDB database. Integrated the data models for users and tasks along with the RESTful APIs for the CRUD operations on these models. The operations are executed through mongoose ODM. Implemented API authentication through JSON Web Token to allow controlled access to the data. Incorporated other features like sorting, pagination, filtering for the data along with the endpoints for uploading files such as user profile pictures. Added, automatic transactional email service through the Sendgrid email service API.

→ Weather Monitoring Application
May 2020

Keywords : Javascript, Asynchronous JS, Node-js, Express.js

- Designed a website to fetch the weather data for any location i.e. area/locality, city, district etc. by passing its name in the form provided. The backend was developed in a Node-js runtime that hosts an Express.js web server. The provided location is converted into latitude and longitude coordinates through an API and passed to another API. Then the weather details for that location are fetched and displayed on the web page. The application uses dynamic templating and asynchronous callbacks for a non-blocking input/output operation.

→ Safety Helmet Detection System
Nov 2019

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

- Worked on the computer vision aspects of deep learning to design an automated system that detects the workers of the construction site who are working without safety helmets, through the CCTV footage. It scans the faces of the violators and generates a ticket. 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 achieved a mean average precision (mAP) of 85 %.

SKILLS

- **Languages :** Python, Java, JavaScript
- **Coursework :** Object Oriented Programming, Data Structures, Algorithms, Information Retrieval Systems, Machine Learning, Deep Learning.
- **Frameworks :** Node.js, Express.js, Keras, Pandas, Selenium
- **Tools :** Git, Heroku