HET PATEL

1110 McKimmon View Ct., Raleigh, NC 27606

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Education

North Carolina State University

August 2021 - May 2023

Master in Computer Science

Raleigh, NC

Coursework: Software Engineering, Design and Analysis of Algorithm, Database Management Concepts and Systems

Vellore Institute of Technology

June 2017 - May 2021

Bachelor of Technology - Computer Science and Engineering; GPA: 9.06/10

Vellore, India

Coursework: Data Structures, Operating System, Artificial Intelligence, Web Mining, Java Programming, Image Processing

Technical Skills

Languages: Java, Python, C, C++, HTML/CSS, JavaScript, SQL

Frameworks and Libraries: Flask, Scikit, NLTK, TensorFlow, Keras, OpenCV, ChatterBot, Tkinter

Platform and Tools: GitHub, VS Code, PyCharm, Google Cloud Platform

Experience

Artificial Intelligence Intern

December 2020 - May 2021

Softvan Pvt. Ltd.

Ahmedabad, Gujarat

- Developed automated process for training of Image Classification model using EfficientNet and its 8 variants, and successfully integrated to "TuskerAI" Platform.
- Designed and deployed real time object detection model, in particular YOLOv4, for different use cases to AWS for "TuskerAI" Platform

PHP Developer Intern

May 2019 - July 2019

Ouranos Technologies Pvt. Ltd.

Ahmedabad, Gujarat

- Improved and developed the back end of a Web Application using PHP. Worked on Flask and integrated chatbot to Web portal.
- Designed database schemas using SQL to model the chatbot's response, integrated 3 ways to find the most appropriate answer based on user's Query.

Projects

Satellite Image Refining for Building Detection | Python, Spyder IDE

April 2020

Proposed and implemented a novel approach for building detection from satellite images using Canny Edge Detector. Various preprocessing was imposed on the satellite image which includes bilateral filter, gray scale, threshold filter, color overlay, open close filter. The accuracy of this novel approach was 93.4%.

Cricket Highlight extractor using Deep Learning and Image Processing | Python, PyCharm IDE December 2019 Various models are trained for six, four, wicket, wide, etc. and integrated into one. Using Deep Learning and Image preprocessing techniques, for a given video, frame's start and end time is adjusted when any of the trained model is processed. Incorporating all the small video frames, highlights for game of cricket will be automatically configured.

Car Parking Allotment Bot | HTML, CSS, JavaScript, PHP, Java, SQL, Pycharm

November 2018

Developed an automated bot to allot available parking space for the cars. Used Xampp local host server to run this project. Additionally, a search box for unallocated parking space module was integrated for any user to directly book any unallocated parking space.

Oceanographic Normalization of SAR Images | Python, Spyder IDE

August 2020

Implemented Histogram Normalization approach for oceanographic SAR (Synthetic aperture radar) Images. Applying some filters and intensity normalization, SAR images were normalized and all the dark spots or blur parts in the SAR images were minimized. This work was part of ISRO's project.

Accomplishments / Extracurricular

- Accepted Book Chapter in Springer, Book Name: Artificial Intelligence based Agriculture, Chapter Name: A computational approach for prediction and modelling of agriculture crop using Artificial Intelligence.
- Qualified in Top 5 in Hack4Cause 3.0 conducted by SSIT.
- Successfully cleared 2 rounds for HackerTech 2019 hosted by E-Cell Club, VIT University.
- AWS Fundamentals: Going Cloud-Native Coursera.