### HET PATEL

1110 McKimmon View Ct., Apt. 201, Raleigh, NC 27606

# Education

## • North Carolina State University

Raleigh, NC

Master of Computer Science; GPA: 4.0/4.0

Anticipated May 2023

Coursework: Software Engineering, Artificial Intelligence, Design & Analysis of Algorithm

### • Vellore Institute of Technology

Vellore, India

B. Tech in Computer Science & Engineering; GPA: 9.06/10

June 2017 - May 2021

Coursework: Data Structures & Algorithms, Software Engineering, Machine Learning, Image Processing

### Technical Skills

Programming Languages: Java, Python, JavaScript, PHP, SQL, HTML/CSS, ReactJS, Node.js

Frameworks & Web Technologies: JDBC, Flask, NLTK, Scikit-learn, Keras, TensorFlow, OpenCV, Express, Mongoose

Database, Tools & Platforms: Git, AWS, Terraform, Docker, BitBucket, MySQL, MongoDB, VS Code

# Experience

### Artificial Intelligence Intern, Softvan Pvt. Ltd., Ahmedabad, India

Dec 2020 - May 2021

- Developed a complete pipeline to automate training of image classification models using EfficientNet and its 8 variants by accumulating data restructuring, processing hyper parameters, model training, and generating model metrics of trained models which achieved accuracy of 94%.
- Designed and Implemented real time object detection model by YOLOv4. An image dataset was annotated by selecting multiple ROI's from live RTSP camera feed, the model metrics were tested by Mean Square Error (MSE) and Structural Similarity Index Measure (SSIM), and efficacy of 98% was achieved.

### PHP Developer Intern, Ouranos Technologies Pvt. Ltd., Ahmedabad, India

May 2019 - Jul 2019

- Researched and programmed the back end of a Web Application using PHP. Worked on Flask and integrated a chatbot that acknowledges the customer's query on the Web portal, and provided accurate answers up-to 86%.
- Used SQL for designing database schemas to model the chatbot's response and integrated trigger's for database
- Built a system that fetches the finest response based on user's Query and reduced processing time by 40%.

### **Projects**

- SRIJAS (Smart Resume Interpreter and Job Alert System): Using Python, Terraform, JavaScript, and AWS, a complete functional CI/CD cycle for the project was developed reducing release time by 70%. Leveraging Github Workflow, a test server was configured to run unit tests. Terraform was used to create Infrastructure as Code for complex Web and Database servers, resulting in a 0% error rate.
- CheapBuy Extension: A Google extension was created which provides comparison of the prices for every product available in different e-commerce websites. Web-Scrapper was designed in python with the use of Beautiful Soup and incorporated into extension. A test server was set up to perform unit tests using Github Workflow. An interactive, real-time UI was built, so enabling our extension from the product page would fetch prices of the same product through different e-commerce websites.
- Car Parking Allotment Bot: Developed an automated bot to allot available parking space for the cars and tested on XAMPP local host server. The Bot was developed using PHP & JavaScript, and database was maintained on MySQL. Additionally, a search box for unallocated parking space module was integrated for any user to directly pick unallocated parking space.
- Oceanographic Normalization of SAR Images: Implemented Histogram Normalization approach for oceanographic SAR (Synthetic aperture radar) Images as a part of Indian Space Research Organization's (ISRO) project. Imposing multiple filters and intensity normalization on SAR Images, blur spots were reduced by 80%.

## Achievements / Extra-Curriculars

- 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.