Sai Divya Sivani Pragadaraju

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Passionate and enthusiastic graduate with strong coding skills and a good understanding of software engineering principles. Diligent and organized, a firm believer in constant learning and building efficient solutions. Amateur artist and Creative individual with a keen eye for detail.

EDUCATION

University Of Colorado Boulder, CO, US **August 2021 – May 2023**
Master of Science in Computer Science **GPA – 3.92/4**

Coursework - Deep Learning, Design and Analysis of Algorithms, Natural Language Processing, Object Oriented Analysis and Design (OOAD), Data Mining, Linear Programming, Data Center Scale Computing, Computer Vision

B.V.Raju Institute Of Technology, Narsapur, Telangana, India **August 2016 – May 2020**
Bachelors of Technology in Computer Science **GPA-9.01/10**

Coursework: Java Programming, Advanced Data Structures, Database Management Systems, Web Technologies, Big Data Analytics, Internet of Things, Machine Learning

TECHNICAL SKILLS

Programming Languages: Python, SQL, Java, C

Web Technologies: HTML, CSS, JavaScript, Node.js, Angular,

Libraries and Frameworks: Numpy, Matplotlib, Pandas, TensorFlow, Keras, Scikitlearn, Pytorch, Hugging Face, OpenCV, Flask

Technologies: MySQL, Docker, Kubernetes, REST API, Google Cloud Platform(GCP), Min.IO, Redis, Cloud vision API, Sendgrid API

Key Skills: Data Structures and Algorithms, Machine Learning and Deep Learning Algorithms

EXPERIENCE

Research Assistant **April 2022 - Present**
Peleg Lab, CU Boulder
- Assisting Dr. Orit Peleg's research on honeybee swarm formation patterns by performing computational analysis on experimental video data
- Analyzing geometrical patterns in swarms using python libraries like OpenCV, NumPy, Pandas, Matplotlib, SciPy, Keras, Scikitlearn to comprehend how bees gather into swarms and uphold a stable structure in all circumstances

Graduate Instructional Support staff- Machine learning **August 2021 – December 2021**
Computer Science Department, CU Boulder
- Assisted over 60+ students in undergraduate level Machine Learning course and graded their assignments

PROJECTS

Website and Mobile Application for QI Path (Capstone):
- Engineering a cross-platform mobile application using NativeScript and Angular Framework
- Built REST API endpoints using Node.js which will be used by the website and mobile application
- Enhanced and modernized the current system by updating the codebase from PHP to Angular and Node.js framework

Human Activity Recognition using smartphones:
- Developed a machine learning model that can identify some human activities from the data collected through smartphone's inertial sensors
- Utilized libraries such as Numpy, Pandas, Scikit-learn, matplotlib, Statsmodel, Spectrum
- Constructed a signal processing pipeline to process original data collected and built a Machine Learning pipeline to train models using GaussianNB, Decision-tree and Logistic Regression algorithms

Electronic Assistant for Prescription Drugs:
- Created an application that provides a distributed and scalable service by easing the process of buying prescribed medicines
- Utilized Google cloud Vision API to extract the list of medicines from the prescription and SendGrid API to send out the emails
- Used Min.io to store the uploaded images, MySQL to store the inventory of medicines and Redis queuing system to store the logs
- Implemented OpenFass serverless functions to enable the auto-scaling of pods
- Deployed the application using docker and Kubernetes

Apartment Finder website:
- Created a website that allows users to find an apartment, make a reservation to visit it and provide feedback
- Implemented backend using Java, Maven, Spring MVC framework, hibernate framework, JSP
- Used MySQL to store all apartment and user related information
- Frontend using HTML, CSS, and JavaScript

PCL using BERT:
- Identified patronizing and condescending languages from given a given paragraph
- Trained a classification model on dontpatronizeme_PCL dataset
- Programmed using Hugging face library's Transformers and BERT pre-trained model
- Used NumPy, Pandas, TensorFlow, Scikit-learn, Pytorch as helper libraries