Kavya Sree Polavarapu

Education

 J 213-675-0327
 ■ kpolavar@usc.edu
 Imlinkedin.com/in/kavyasree14/
 Q github.com/Kavyasree14

University of Southern California

May 2023 - Dec 2024

Masters of Science in Computer Science

Los Angeles, CA

Related Coursework: Analysis of Algorithms, Web Technologies, Data Science, Database Systems

Gandhi Institute of Technology and Management

Jun 2018 - May 2022

Bachelor of Technology in Computer Science and Engineering

Visakhapatnam, India

Technical Skills

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

Frameworks: PyTorch, Flask, TensorFlow, React, Django, Node.js, Unity, Angular, REST, GraphQL

Libraries: OpenCV, TensorFlow, Pandas, Numpy, Scikit-learn, Matplotlib Tools & Technologies: Eclipse, AWS, GCP, Git, Seaborn, Anaconda Toolkit, Google Colab

Database Systems: MySQL, Firebase, MongoDB

Internship Experience

coMakeIT Software Pvt. Ltd

Jun 2021 - Sep 2021

Machine Learning Intern

Hyderabad, India

- Developed a real-time license plate recognition system using OpenCV and Haar classifiers, and extracted regions of interest from live video streams improving accuracy by 10% from existing model.
- Spearheaded transition from manual to automated parking management system and designed a user-friendly dashboard displays crucial information from camera traps cutting down manual costs by 50%.

Gas Authority of India Limited (GAIL)

Oct 2020 - Nov 2020

Software Developer Intern

Rajahmundry, India

- Designed systems to streamline HR processes by implementing leave tracking functionalities based on employee dependencies reducing manual effort by 40%.
- Employed sorting algorithms for automating data organization using C++ and MySQL.

Projects

Stock Search Web Application and IOS Application | HTML5, Bootstrap, Angular, Node.js, MongoDB, GCP, IOS

- Devised a responsive Stock Search Web Application using HTML5, Bootstrap, Angular, and Node.js, and extended capabilities to an iOS app utilizing Swift and SwiftUI.
- Implemented server-side operations and database management using Node.js and MongoDB on GCP, ensuring scalability.
- Integrated Finnhub and Polygon.io APIs via RESTful web services to dynamically retrieve and display data, adding a Watchlist and Portfolio feature to track stocks and manage investments on both web and iOS platforms.
- Enhanced user experience with responsive design and AJAX for dynamic content updates, while applying the MVVM design pattern in iOS development.

Predicting Autism Spectrum Disorder using Supervised Learning Algorithms | Python, Flask, Matplotlib

- Led the development of an ASD prediction model, achieving a 99% accuracy rate with AdaBoost and published in IRJET April 2022, enhancing diagnostic accuracy and user engagement through multiple machine learning tree models.
- Improved dataset quality through adept handling of missing values and outliers, resulting in perfect precision, recall, support and f1-score.
- Created a Flask front-end application integrating the Random Forest algorithm, achieving faster response time for real-time autism trait prediction.

USC Campus Safety Analysis | Python, Tableau

- Constructed a comprehensive data analytics project using Python and Tableau to visualize crime trends around USC, extracting insights from a decade of LAPD crime data to identify high-risk time periods and areas.
- Analyzed temporal and geographical crime patterns to propose targeted security measures, effectively addressing potential

Hospital Management System | React, NodeJS, GraphQL, MongoDB, HTML, CSS

- Engineered a React-based front-end for a hospital management system, streamlining patient interactions with features like appointment booking and doctor searches.
- Implemented a scalable backend using a Node.js-powered GraphQL API to ensure efficient hospital data management.
- Established a MongoDB database to organize patient health records in real-time, significantly enhancing data accuracy and accessibility for medical staff.

Leadership / Extracurricular

- Coordinated technical and soft-skills training for over 200 students as the Program Coordinator of GITAM University's IEEE Student Branch and completed ISRO IIRS's online Basics of Remote Sensing GIS course.
- Managed a cohort of 650 students and resolved their queries as a Course Producer for Database Systems at USC.
- Recipient of the Merit Scholarship at GITAM University for academic excellence and outstanding achievements.