Aakash

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Summary

Detail-oriented Data Scientist with a strong background in Python, data analysis, and machine learning. Experienced in developing and deploying data-driven solutions and predictive models. Proficient in data visualization, natural language processing, and web scraping. Skilled in using libraries such as Keras, TensorFlow, and Pytorch, with a robust understanding of data structures and statistical analysis.

Education

Bachelor of Computer Application (BCA) | Percent - 87.2 Dec 2021 - 2024
Sirifort Institute of Management Studies, Delhi, India

Skills

Python, Java, C++, Data Structures, Data Visualization, Web Scraping, Natural Language Processing, Keras, TensorFlow, Pytorch, Numpy, Pandas, SciKit Learn, Jupyter Notebook, Git

Project Experience

Web Chat Application

- Developed a chat application with real-time communication using WebSockets and AI-driven responses.
- Implemented user authentication and session management, ensuring secure access and efficient user tracking.
- Integrated a machine learning model to generate AI responses for user queries, enhancing user engagement.
- Stored chat history and user sessions in a MySQL database for persistence and retrieval.
- Ensured password security using bcrypt for hashing and verification processes.
- Technologies: Flask, Flask-SQLAlchemy, Flask-SocketIO, Flask-CORS, MySQL, Google GenerativeAI.

Image Object detection

- Created OpenVision, an advanced image detection system using deep learning for precise object recognition.
- Enabled image uploads from user devices or directly from webcams for real-time analysis.
- Implemented smart algorithms using YOLO for high-accuracy object detection.
- Developed a user-friendly interface with HTML/CSS and JavaScript for seamless interactions.
- Managed data storage and retrieval with SQL, ensuring efficient handling of image data.
- Technologies: PHP, Python, YOLO, HTML/CSS, JavaScript, SQL.

Next Word Predictor

- Developed NextWordPredictor, a deep learning model to predict the next word in a sentence for enhanced text editors and chat applications.
- Trained the model using the IMDB dataset to ensure a broad vocabulary and understanding of language context.
- Implemented a real-time web interface using Flask, allowing users to interact with the model and receive instant predictions.
- Conducted rigorous testing and fine-tuning to optimize the model's performance and accuracy.
- Utilized JavaScript, HTML, and CSS to create an intuitive and responsive user interface.
- Technologies: Python, Keras, TensorFlow, Flask, JavaScript, HTML, CSS.

Languages

Hindi, English