Akshat Chauhan

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github.com/AkZcH

Education

Kalinga Institute of Industrial Technology

Bachelor of Science in Computer Science (CGPA: 8.6 / 10.00)

Expected May 2027 Bhubaneshwar, Odisha

• Relevant Coursework: Data Structures and Algorithms (C), Object Oriented Programming(Java), Database Management systems, Computer Organization and Architecture, Operating Systems (Linux), Theory of Computation, Linear Algebra, Probability & Statistics, Discrete Mathematics

Experience

Class Representative - Freshman Year

August 2023 - April 2024

Bhubaneshwar, Odisha

Kalinga Institute of Industrial Technology

- Conceptualized and directed unique Instagram reels, boosting the club's online engagement by 60% and establishing CyberVault as the premier cybersecurity club at the university.
- Spearheaded 2 major cybersecurity events in collaboration with external organizations, attracting over 500 attendees within just 4 months.
- Directed creative content production by coordinating with a team of 10+ broadcasting members, photographers, and videographers, ensuring high-quality visuals for promotional campaigns.

House Prefect July 2019 - February 2020

DPS Ruby Park Kolkata, West Bengal

- Managed a team of 50 students to organize inter-house competitions and maintain discipline.
- Acted as a mentor and guide to junior students, fostering a positive and inclusive environment.

Projects

Movie Review Sentiment Analysis Web Application

Python, Flask, Pandas, Scikit-learn, NLTK, HTML, CSS, JavaScript

December 2024

- Developed a Natural Language Processing (NLP) model using Logistic Regression and TF-IDF vectorization, achieving an accuracy of over 90% on training data and over 80% on test and validation data after processing over 50,000 movie reviews for Sentiment Analysis.
- Engineered a RESTful API with Flask to deliver real-time sentiment classification for movie reviews, ensuring a response latency of under 10 ms per request.

Deep Learning Model for Visual Speech Recognition

Python, Jupyter Notebooks, Tensorflow, Keras, OpenCV

January 2025

- Developed a deep learning model using Python and TensorFlow that achieved over 80% accuracy in recognizing spoken words from lip movements, enabling potential applications in silent speech recognition and communication aids.
- Processed and trained the model on a dataset of over 200 video clips of lip movements, optimizing the architecture for improved performance and real-time processing capabilities.

Image Classifier using Deep Learning

Python, PyTorch, TorchVision

September 2024

- Developed a deep learning model to classify images as real or Al-generated using a ResNet-18 architecture, achieving 97.5% test accuracy after 10 epochs.
- Preprocessed and augmented a dataset of 400+ images to improve model generalization, resulting in reduced overfitting and high test accuracy.
- Reduced test loss from 1.18 to 0.08, while maintaining high training accuracy of 99% and minimizing overfitting by using a combination of dropout and learning rate adjustments.

Technical Skills

Languages: HTML, CSS, Python, R, SQL, Bash, JavaScript, C, C++

Frameworks: React.js, Express.js, Node.js

Libraries: Pandas, NumPy, Matplotlib, Seaborn, Scikit-learn, Tensorflow, PyTorch, Keras Technologies: Power BI, Tableau, Git, GitHub, MS Excel, MS PowerPoint, MySQL,, MongoDB Soft Skills: Leadership, Communication, Adaptability, Time Management, Teamwork, Bias for Action