RAVNEET KAUR

Computer Science engineering student
ravneetk3420@gmail.com linkedin.com/in/ravneetkaur0110 github.com/Ravneetk342

Education

Vellore Institute of Technology **Bhopal**
B. Tech in Computer Science and Engineering (Artificial Intelligence and Machine Learning), 8.29 CGPA *2022-2026*

Shishu Niketan Model Sr. Sec. School **Chandigarh**
Class XII (PCM), 88.6% *2021-2022*

Manav Mangal School **Panchkula**
Class X , 90.2% *2019-2020*

Experience

Microware Computing & Consulting **Gurugram, Haryana, India**
Machine Learning Engineer *November 2024 - December 2024*

- Designed and implemented a plant disease detection system leveraging machine learning techniques, addressing key agricultural challenges.
- Conducted extensive research and experimentation with architectures like EfficientNet, MobileNet, ResNet, and Inception, achieving the highest accuracy with the Inception model.
- Enhanced model performance through feature engineering, advanced preprocessing, and hyperparameter tuning.
- Detected diseases such as whitefly, bacterial blight, mildew, jassid, and aphids with high precision, aiding in early identification and treatment.
- Acquired proficiency in data augmentation, transfer learning, and evaluating model performance using metrics like accuracy, precision, and recall.
- Improved understanding of agricultural datasets and their implications for real-world applications, contributing to the development of scalable solutions.

Academic Projects

Plant Disease Detection and Solution Description - LINK

- Developed a Streamlit-based web application using CNN models for real-time plant disease detection from uploaded images.
- Incorporated multilingual support, chatbot integration, and image editing capabilities to enhance user accessibility and experience.
- Collaborated in a 5-member team, leveraging Python, Streamlit, TensorFlow, and CNN to deliver a robust solution for effective plant maintenance.

Sentiment Analysis by NLP - LINK

- Developed a sentiment analysis system to classify social media posts into positive and negative categories, enabling real-time monitoring of public opinion.
- Utilized NLP techniques such as lemmatization, stemming, NER, and text classification, with a Naïve Bayes model for accurate sentiment prediction.
- Collaborated in a 5-member team, employing Python, NLTK, and advanced text processing techniques to deliver actionable insights for engagement strategies.

Technical Skills

Languages: Python
Developer Tools: Applied Machine Learning, Convolutional Neural Networks (CNN), Deep Learning
Soft Skills: Leadership, Teamwork, Event Management, Creativity, Problem Solving, Database Handling

Certifications

Simulink Onramp: MathWorks - LINK
Applied Machine Learning in Python : Coursera - LINK
Privacy and Security in Online Social Media: NPTEL - LINK
Fairness ad Trust in the Mathematical Modelling and Machine Learning Techniques - LINK
Python essentials : Vityarthi - LINK
Java Foundations Associate : Oracle - LINK
Cyber Security Analyst : IBM **- LINK**

Co-curricular activities

Health-o-tech Club **VIT Bhopal**
Event Management Team Core Member *November 2024 - Present*
Core member of the Event Management team, responsible for coordinating and executing events, ensuring smooth operations and timely delivery. Collaborated with team members to manage logistics, plan schedules, and oversee event setups. Contributed to marketing efforts, helping promote events that significantly increased participation and engagement.

BashCraft Club **VIT Bhopal**
Design Team Core Member *October 2024 - Present*
Core member of the Design team, responsible for collaborating on design projects and ensuring that creative outputs met high standards. Contributed to social media marketing efforts, assisting in producing engaging reels that garnered over 25k views, which helped boost the club's online presence and audience engagement.
.

Drama Club **VIT Bhopal**
Member
As an important member of the Drama Club, I participated and contributed to drama competitions within and outside the university. These experiences helped me develop my creativity, public speaking and teamwork skills. I played an important role in developing my ability to communicate effectively and confidently in the areas of writing, acting and stage management.