## PROJECTS

# **Logsscan plus** | Python, Anaconda, Comp, Pytorch

Link

- Advanced AI for Remote Sensing An advanced deep learning model integrating Global Class Awareness (GCA) and Local Class Awareness (LCA) for semantic segmentation of remote sensing images, significantly improving segmentation accuracy.
- Comprehensive Dataset Analysis Model Enhancement Conducted an in-depth study of multiple remote sensing datasets, analyzing their advantages and limitations. Researched and identified key challenges, proposing improvements to refine segmentation performance.

# Power BI Data Analysis Dashboard | Power BI, Excel

Link

- Built a clean and intuitive Power BI dashboard for analyzing structured datasets.
- Focused on creating simple, effective layouts to highlight key insights clearly.
- Developed strong foundational skills to handle future data analysis workloads with ease.

## ConsistentI2V | Python, Gradio, Pytorch

Link

- Enhanced visual consistency- By maintaining spatial and motion coherence across video sequences. Achieved 53.62% appearance consistency, outperforming prior models in human evaluations with smoother, more coherent results.
- Innovated FrameInit for Layout-Guided Noise Initialization Devised a technique to use the low-frequency band of the
  first frame during inference, significantly improving video stability and enabling applications like autoregressive long
  video generation.

# Chat Bot for Students | Python, Flask, Pytorch

Link

- Developed a cutting-edge chatbot leveraging NLP and speech recognition to transform student assistance.
- Achieved approximately 70% accuracy in understanding and responding to complex natural language queries during validation through advanced NLP integration.
- Collaboratively built a website integrating technologies such as Flask, HTML, CSS, and JavaScript with the chatbot model, successfully demonstrating it live.

FlapPyBird | Python

- Created an interactive Flappy Bird clone with Python and Pygame, employing OpenCV and MediaPipe for gesture controls; received positive feedback from 95% of beta testers for intuitive user interface design.
- Worked closely with team members to enable both desktop and browser gameplay, ensuring a seamless setup process with over 90% accuracy in gesture recognition.

# Twitter Sentiment Analysis Extension | Python, Flask

Link

- Initiated a browser extension using Flask to analyze tweet sentiment in real-time, boasting an accuracy of 89% in classifying tweets as positive or negative.
- Trained and integrated a sentiment analysis model, providing users with immediate feedback on tweet sentiment for a seamless experience.

### Research Paper

Vishnu Teja.M, MR Naveen Kumar, and DR. Annappa. Multi Criteria Based Container Management in a Geo-Distributed Cluster. *IEEE Connect*, Track 5, 2024

### ACHIVEMENTS

GATE 2025 (Data Analytics): Secured All India Rank 915.

## TECHNICAL SKILLS

Programming Languages: Python, C++, C, Java, Matlab

Developer Tools: VS Code, Git, PyCharm, Power BI

Cloud Computing: Azure, Kubernetes, GCP, AWS, Prometheus

Technologies/Frameworks: PyTorch, TensorFlow, DBMS, Linux, IoT, Flask, Deep Learning, Machine learning

## **EDUCATION**

### NIT Andhra Pradesh

2021 - 2025

BTech Major in Electronics & Communication and Minor in AI for Signal Processing

CGPA: 8.2/10

Dr K.K.R's Happy Valley School

2015-2021 Percentage: 94%

Higher Secondary

## EXPERIENCE

## Amazon ML School

July 2024 - August 2024

#### Amazon

- Earned selection for Amazon ML School 2024, an intensive program focused on advanced machine learning methodologies and scalable model deployment on AWS, refining both theoretical understanding and practical implementation skills.
- Gained expertise in deep learning techniques like neural networks and large language models, equipping me to apply
  these skills in future projects

# **Cloud Computing Intern**

June 2023 – December 2023

DR.Annappa, NIT Suratkal

- Applied advanced Kubernetes skills to expertly manage set-up in minimal time, migration, and algorithm
  development, ensuring seamless workload management and optimal system performance.
- Leveraged expertise in GCP and Azure Cloud Services to streamline project setup and deployment, enhancing overall experiment efficiency by 50% and demonstrating substantial improvements in cloud development processes.
- Optimized system performance and resolved issues to ensure high efficiency and reliability in a Kubernetes environment, reducing system overload by 75

#### Research Intern

June 2022 – August 2022

DR.Sandeep, NIT Andhra Pradesh

- Streamlined a detailed benchmarking study of 10 leading battery technologies, assessing performance against industry standards; product managers now utilize outcomes to refine specifications and guide future product offerings.
- Collaborated closely with a cross-functional team, ensuring effective communication and coordination, while reviewing
  and analyzing over 50 battery models and numerous research papers to gain insights into recent technological
  improvements and the future potential of emerging concepts, ultimately accelerating project completion.

# CLUBS AND EXTRA-CURRICULAR ACTIVITIES

ECE Herald Link

- Collaborative Teamwork: Contributed to the "Herald" magazine by collaborating with 10+ team members to publish issues reaching 500+ readers, while editing 20+ articles to enhance clarity and maintain editorial standards.

### SUMMARY

BTech student in Electronics Communication with experience in machine learning, cloud computing, and software development. Worked on projects involving deep learning, NLP, and video generation, including research in AI-driven video consistency.

Skilled in cloud platforms like GCP and Azure, Kubernetes management, and system optimization. Experience in collaborative projects, technical writing, and deploying ML models on cloud environments.

Deeply passionate about machine learning, constantly exploring new advancements in AI, deep learning, and data-driven decision-making. Currently enhancing skills in Power BI to complement ML expertise, aiming to build impactful AI-driven solutions.