

SANJAN B M

Bachelor of Engineering in Computer Science & AI/ML Engineering
ATME College of Engineering, Mysore

+91 9535752673 ✉ sanjanacharaya1234@gmail.com  LinkedIn  GitHub  Portfolio

Experience

SynerSense pvt. ltd.

Jun 2025 - Present

Vision Language Model Developer and Research Intern | Ahmedabad, Gujarat

Remote

- Built **vision-language pipelines** using CLIP and VLM models, integrating visual embeddings into custom MLP classifiers to improve multi-modal performance.
- Authored and published **technical documentation** with GitHub Pages, covering research papers, visual workflows, and reproducible experiments using Hugging Face and PyTorch.
- Enhanced experimentation reproducibility by implementing **MLflow for model tracking and version control**.

IEEE CS Society – IAMPro

Jun 2024 – Aug 2024

Deep Learning Project Intern | Bengaluru, Karnataka

Remote

- Designed **AI-based pest detection models** with image recognition to identify early-stage crop infestations with improved accuracy.
- Leveraged **climatic datasets** to enhance crop cultivation planning, applying machine learning for yield optimization.
- Explored **generative AI and robotics applications** in sustainable agriculture and food security initiatives.

Projects

AI-Powered CTI System | NLP & Threat Intelligence, Major Project

 Repo Link

- Co-developed an AI-based CTI system using spaCy and Hugging Face Transformers for **IOC extraction** and **threat classification**.
- Built a scalable FastAPI backend serving **real-time NLP analytics** and integrated an interactive Jinja2 dashboard.
- Containerized with Docker** and deployed via Docker Compose for easy cloud deployment.
- Designed clean UX for rapid threat insights with downloadable report outputs.

GAN for Fashion Item Generation | GAN-Gen AI Project

 Repo Link

- Developed **GANs with TensorFlow & Karas** to generate realistic grayscale images from the Fashion MNIST dataset.
- Improved training stability using **LeakyReLU activations and batch normalization**, enhancing output quality.
- Implemented **MLflow experiment tracking**, ensuring reproducibility and efficient hyperparameter tuning.

Aspirise – AI-Powered Mental Health Wellness Advisor | NLP, Project

 Repo Link

- Built an AI-driven advisor to detect early signs of **depression and anxiety** using NLP techniques.
- Delivered **personalized wellness recommendations** by training models on real-world mental health datasets.

BERT-Based Sentiment Analysis | NLP Project, BERT Project

 Repo Link

- Developed a **text classification** model leveraging **BERT** to perform sentiment analysis on the IMDB movie reviews dataset, achieving high accuracy in distinguishing positive and negative sentiments.
- Conducted comprehensive data preprocessing, including **tokenization, padding**, and attention **mask** creation, to prepare textual data for effective input into the **BERT** model.
- Explored and addressed potential **biases** in BERT's predictions, particularly gender bias, by analyzing model outputs and discussing mitigation strategies to promote fairness in NLP applications.

Technical Skills and Interests

Languages: Python (Advanced), C (Intermediate), SQL (Intermediate), Java, TypeScript
Libraries and Frameworks: PyTorch, TensorFlow, Karas, Scikit-Learn, Hugging Face Transformers, MLflow, FastAPI, Flask, NumPy, Pandas
Developer Tools: Git, GitHub, Jupyter Notebook, VS Code, Google Colab, Docker, DagsHub
Specializations: Large Language Models (BERT, GPT, CLIP, Vision-Language Models), Generative AI, MLOps, NLP, Deep Learning, Computer Visions
Institute Core Subjects: Deep Learning, Python for Data Science, Data Structures and Algorithms, Database Management Systems, Operating Systems, Probability and Statistics, Discrete Structures and Matrix Algebra

Leadership & Extracurriculars

Vice Chair | IEEE ATME SB, Mysuru **Sept 2024 – Present**

- Led **5+ workshops and hackathons** focused on AI/ML, engaging over 200 students.
- Coordinated industry collaborations and guest lectures, improving student exposure to cutting-edge technologies.

Kaggle Practitioner | **May 2024 – Present**

- Contributed to **ML and DL competitions**, achieving recognition for effective data preprocessing and ensemble model building.

Education

ATME College of Engineering, Mysore **Nov 2022 – Present**
Bachelor of Engineering in Computer Science& AIML Engineering (Hons.) *CGPA: 9.23*

Awards & Achievements

- Best Student Award (2024)** – Awarded by Lions International, Multiple District 317 & Negilayogi Samaja Seva Trust at Senate Bhavan, Mysuru, for outstanding academic, extracurricular and leadership excellence.
- Published Researcher** – Contributed to research in AI/ML applications, with papers submitted under ATME College of Engineering.