




Anshuman Swain

 [anshuman-8.vercel.app](https://github.com/anshuman-8)
 anshuman8swain@gmail.com
 [anshuman-8](https://github.com/anshuman-8)

About Me

Passionate about AI with expertise in Deep Learning, Computer Vision, Language Models, and crafting exceptional Web and Mobile applications.

Education

Amrita Viswa Vidyapeetham

Bachelor's in Technology

Major: Computer Science and Artificial Intelligence

CGPA: 8.6/10

Kerala, India

September 2021 – August 2025

Experience

Endoscopy Ultrasound Research (EUS-ML)

Computer Vision Research Intern

June 2023 – Present

DevOps, ML, DL

- EUS-ML is an ongoing research project under the supervision of [Gilad Gressel](#), focused on classifying endoscopy stations to assist doctors during EUS procedures, as well as segmenting images for the detection and classification of pancreatic cancer.
- My work includes preprocessing raw data from the EUS video feed, annotating it with labels from another software, and generating inferences after each training session across a range of models and hyperparameter configurations.
- Designed and Maintained MLOps tools and infrastructure to support the deep learning project, resulting in streamlined development and deployment processes.

CIR, Amrita

Full Stack Developer

Sep 2022 – Dec 2022

NextJS, MongoDB, Express

- My job was to design and build a web portal to track all Internships of Amrita Students by the Corporate and Industrial Relations(CIR) department of the University.
- It had all the features like an auto-generating letter, authentication, and approval system.

amFOSS

Member and Mentor

December 2021 – Present

amFOSS is the Free and Open Source Software club of my college. I am an active member and also mentor my juniors and get them exposed to new technologies and open source as well.

Projects

Aaraki - RAG + Chat History

Llama-2, Langchain, PineconeDB

[Code](#)

Sep 2023

Developed a command-line interface (CLI) application for multi-PDF analysis and summarization utilizing text retrieval and generation with Llama-13B large language model. Users can pass multiple PDFs to the app and ask questions, with the system maintaining context through chat history.

Gastrointestinal Polyp Segmentation

PyTorch, Python, Computer Vision

[Repository](#)

Sep 2023

In this project, I developed an image segmentation model using the U-Net architecture in PyTorch. It was trained on the Kvasir-SEG dataset, consisting of gastrointestinal polyp images and their corresponding segmentation masks. I applied various data augmentation techniques and conducted hyperparameter tuning to optimize performance metrics (Dice Coefficient, IoU, BCE).

Caption Mosaic

PyTorch, Python, Computer Vision

[Repository](#)

Aug 2023

I developed an image captioning model utilizing a fine-tuned ResNet101 combined with an LSTM for caption generation. This model was trained on the Flickr30k dataset, and I personally handled all aspects including architecture design, preprocessing, training, testing using PyTorch, and did hyperparameter tuning for better results.

Antibiotic Stewardship Project

Django, NextJS, React, GraphQL

[Frontend, Server](#)

Feb - Jun 2023

A portal used by the microbiology department of Amrita Hospital which is one of the largest super-specialty health centers in India. Using this portal, the hospital manages their septic patients undergoing reserved antibiotic medication, which includes checking their active patients, keeping their culture reports, clinical signs, and getting their daily medical report reviewed by a doctor.

WikiGeoEditor

React, Django, Web Scraping, Cronjob, Rest Framework

[Repository](#)

Feb 2023

WikiGeoEditor is a tool created for Wikipedia editors. Here you can see the active contributors and editors around the world. It gets its data by scraping a website, done using a cron job. The data is then displayed on the front end in a table with multiple filter options.

CIR Internship Portal

NextJS, Express, MongoDB, TailwindCSS, NodeJS

[Repository](#)

Nov-Dec 2022

This portal was made for my university's Corporate and Industrial Relations(CIR) department. It helps the students get job internships through the CIR department and aids the department in managing incoming internships from other companies.

GitHub-Duel

NextJS, TailwindCSS, GitHub API

[Repository](#)

Sep 2022

A fun personal project website to compare GitHub profiles. It determines which profile is superior. It also scores the project on the basis of their contributions, pull requests, projects, followers, etc.

Technical skills

Languages

Python, C++, JavaScript, Typescript, Java, HTML, CSS, GraphQL

Frameworks

PyTorch, NumPy, Open CV, React, Next.js, Django, Node.js

Tools

Git, Linux, Docker, VS Code