Satyam Singh

satyamsingh7734@gmail.com | +91 9918437706
Linkedin linkedin.com/in/satyam8306 | GitHub: github.com/SatyamSingh8306
HuggingFace : huggingface.co/aicinema69| Kaggle : kaggle.com/satyamsingh8306

EDUCATION

National Institute of Technology Nagaland — **Chumukedima, Nagaland**
B.Tech in Computer Science — *Expected Graduation, May 2027*
CGPA: 9.85

SUMMARY

Aspiring AI/ML Intern with hands-on experience in LLMs, Computer Vision, and Deep Learning. Passionate about building scalable AI solutions and contributing to impactful real-world projects.

- Proficient in Python (Flask, Scikit-learn, TensorFlow, OpenCV, LangChain, Ollama) with experience in full-stack AI development.
- Led multiple end-to-end AI projects involving planning, model training, API integration, and deployment.
- Actively learning and implementing state-of-the-art techniques in AI agents, RAG, NLP, and multimodal systems.

EXPERIENCE

Open Source Contributor – GirlScript Summer of Code (GSSoC)

Remote | March 2024 – May 2024

- Implemented a custom 404 error handler page for NexTrade, an open-source trading platform, improving user experience during navigation errors (#121)
- Contributed to open-source projects by fixing bugs, improving documentation, and adding new features.
- Collaborated with project maintainers and other contributors through GitHub, pull requests, and issue tracking.

PROJECTS

WebMind – AI-Powered Web Agent

February 2025 – March 2025 | Tools: LangChain, Python, Gemini 2 Flash, BeautifulSoup, LLMs

- Built an autonomous agent capable of browsing the web, reading pages, and returning real-time insights.
- Used LangChain's agent framework to execute step-wise reasoning and fetch data from websites.
- Integrated Gemini 2 Flash for fast LLM response generation and enhanced contextual awareness.
- Handled HTML parsing and DOM traversal using BeautifulSoup for structured info extraction.
- Enabled instruction-following and question-answering through web search — similar to WebGPT.

MedicalDAS 2.0 – AI-Powered Healthcare Assistant

January 2025 - February 2025 | Tools: Python, Gradio, TensorFlow, OpenCV, ElevenLabs, GROQ API

- Developed a multimodal AI assistant to analyze patient images and voice queries in real-time.
- Integrated Speech-to-Text (STT) and Text-to-Speech (TTS) via ElevenLabs API.
- Configured GROQ API for low-latency inference and medical response generation.
- Built a Gradio UI enabling interaction through voice and image uploads.
- Combined LLMs with CV for diagnostics using X-ray and report analysis.

MedicalDAS – RAG Application Chatbot

Feb 2025 – March 2025 | Tools: Streamlit, FAISS, LangChain, Mitral-7B, PDF Loader

- Built a Retrieval-Augmented Generation (RAG) chatbot to answer queries from medical PDFs.
- Used FAISS for vector similarity search and document chunk retrieval.
- Integrated Mitral-7B API with LangChain for context-aware response generation.
- Implemented preprocessing pipeline for PDFs using LangChain's loader modules.
- Deployed via Streamlit for smooth interaction and real-time inference.

Car Counter Using YOLO

Dec 2024 – Jan 2025 | Tools: Python, OpenCV, Ultralytics YOLO

- Built a real-time vehicle detection and counting system using YOLOv8.
- Processed live or recorded video streams using OpenCV.
- Tuned detection thresholds and optimized inference speed.
- Tested across traffic intersections and parking lot scenarios.
- Achieved accurate object detection under varied lighting and occlusion conditions

Credit Scoring Model Development

June 2023 – July 2023 | Tools: NumPy, Pandas, Scikit-learn, Flask

- Created a machine learning model to predict a borrower's creditworthiness with MLOPs.
- Performed feature engineering, EDA, model tuning, and evaluation.
- Built an interactive HTML/CSS front-end and Flask backend for real-time scoring.
- Achieved ~80% accuracy using Gradient Boosting Classifier.
- Implemented Scikit-learn Pipelines for reproducibility and maintainability.

ACADEMIC ACHIEVEMENTS

- Assistant Coding Secretary at NIT Nagaland; organized and hosted coding competitions, workshops, and major tech fests including Ekarikthin and Tech Avinya.
- Secured second position in the "Treasure Hunt" coding competition at the Ekarikthin Tech Fest, demonstrating strong problem-solving and team collaboration skills.
- Collaborating on a research project focused on deep learning and computer vision under faculty supervision, contributing to academic research in AI.
- Actively participated in a one-day seminar on cutting-edge AI technologies, enhancing exposure to advancements in Generative AI, LLMs, and real-world AI systems.
- Recognized for consistent academic excellence with a current CGPA of 9.85, among the top performers in the Computer Science department.
- Completed and deployed multiple real-world AI projects involving LLMs, RAG-based systems, object detection with YOLO, and multimodal AI solutions.

SKILLS

Programming Languages: JavaScript, Python, C, Java, SQL, HTML/CSS
Web Development: MERN Stack (MongoDB, Express.js, React.js, Node.js), REST APIs, Bootstrap, Next.js (Learning)
Frameworks & Libraries: Flask, TensorFlow, Scikit-learn, NumPy, Pandas, OpenCV, Matplotlib, Seaborn, BeautifulSoup, Gensim, Langchain, Pytorch, NLTK, Scipy, Streamlit
Machine Learning & AI: Supervised & Unsupervised Learning, Deep Learning, Natural Language Processing (NLP), Object Detection, Retrieval-Augmented Generation (RAG), Large Language Models (LLMs), LangChain, Ollama, DSA
Neural Networks: ANN, CNN, RNN, LSTM, GRU, Bidirectional RNN, Transformers
Tools & Platforms: Git, GitHub, VS Code, PyCharm, Bootstrap, Kaggle, Hugging Face
Database & Backend: MongoDB, SQL, DBMS
Dev Tools: Postman, Docker

Certificates/ Badges

- GitHub Foundation (GitHub)
- Machine Learning with Python Level 1 (IBM)
- Python and Problem Solving (Hacker Rank)
- Introduction to Programming Using HTML/CSS (Cognitive Class)
- AI with Python (Infosys Springboard)
- 100 Days of Machine Learning (Campus X)
- 100 Days of Deep Learning (Campus X)
- AI Agent Foundation (Hugging Face)
- Sigma Web Development (Code with Harry)