Aditya Gupta

Bhopal, India | ✉ ag82620790@gmail.com | in linkedin.com/in/aditya-gupta | ○ github.com/Aditya20032004

SUMMARY

Machine Learning Scientist specializing in deep learning algorithms and end-to-end ML pipeline development. Proven expertise in designing and deploying AI solutions including RAG systems, computer vision applications, and optimized models for edge computing.

PROJECTS

RAG Pipeline for Document QA *Python, Hugging Face*
- Architected Retrieval-Augmented Generation system that automated information verification, achieving 95% accuracy and reducing manual fact-checking time by 70%

Industrial Defect Detection System *Python, TensorFlow, OpenCV*
- Developed CNN model for automated quality control that achieved ¿95% accuracy and reduced defects by 45% through full ML pipeline implementation

Model Robustness Framework *Python, Scikit-learn, Streamlit*
- Engineered testing framework with interactive visualization that accelerated model validation by 50% and improved robustness metrics by 35%

TECHNICAL SKILLS

- **Machine Learning:** Deep Learning, Predictive Modeling, Statistical Analysis, Hyperparameter Optimization, Model Validation, MLOps

- **Generative AI & NLP:** RAG, LLMs, Transformers, BERT, Fine-Tuning, NLP, LangChain

- **Computer Vision:** CNNs, Object Detection, Image Classification, OpenCV, TensorFlow Lite

- **Programming Languages:** Python, SQL

- **Libraries & Frameworks:** PyTorch, TensorFlow, Keras, Scikit-learn, Pandas, NumPy, Hugging Face

- **Cloud & Deployment:** AWS (EC2, S3), Azure ML, FastAPI, Streamlit

- **Tools & Methods:** Git, CI/CD, Experiment Tracking, Edge Impulse

EXPERIENCE

Deloitte Virtual Internship *Jul 2025 - Present*
Forage
- Executed end-to-end ML project lifecycles from data engineering to model deployment in AWS environments

- Implemented MLOps workflows for scalable AI solutions, reducing deployment time by 30%

IT Internship & AI Certification *May 2025 - Jul 2025*
Larsen & Toubro (L&T)
- Developed computer vision CNN for automated fault detection, improving quality assurance precision by 40%

- Optimized models using TensorFlow Lite and quantization, achieving 60% reduction in inference latency

EDUCATION

VIT Bhopal University, Sehore **Expected 2027**
B.Tech, Computer Science (Artificial Intelligence & Machine Learning)
CGPA: 9.06/10.0
Lucknow Public School, Lucknow
12th Grade: 86.2%   10th Grade: 94.5%

CERTIFICATIONS

- L&T - AI & Edge Computing (Specialization in TinyML and Model Optimization)

ACHIEVEMENTS

- **Technical Core Member** — Freelancing Club, VIT Bhopal