

AMAN GUPTA

AI/ML ENGINEER

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GitHub | LinkedIn | Portfolio | LeetCode

SUMMARY

Bachelor of Technology in Computer Science and Engineering (Data Science) student (SGPA 9.55) and ML practitioner experienced in classical machine learning, boosting algorithms, deep learning, NLP, and computer vision. Builds models end to end — from data pipelines and feature engineering to deployment via Flask APIs. Delivered real-time CV and NLP systems and contributed merged pull requests to widely used open-source repositories. Seeking a 2025–26 Machine Learning Engineer internship to contribute hands-on from day one.

TECHNICAL SKILLS

Languages: Python, Java, SQL

Classical ML: Scikit-learn, XGBoost, LightGBM, Random Forest, Gradient Boosting, Regression, Classification

Deep Learning: TensorFlow, Keras, CNNs, Vision Transformers (ViT), Transfer Learning

CV / NLP: OpenCV, MediaPipe, Grad-CAM, NLTK, Transformers, OCR

Deployment & Tools: Flask, REST APIs, Docker, Git, GitHub, Google Colab

Data & Databases: pandas, NumPy, Feature Engineering, Model Evaluation, MySQL, MongoDB

PROJECTS

DeepProvenance — AI Media Authenticity Platform | Python, ViT, Deep Learning, Grad-CAM

- Built a deep-learning platform detecting AI-generated fake media using Vision Transformer (ViT) forensics with Grad-CAM explainability for model interpretability.
- Anchored verified content with tamper-proof provenance certificates, integrating the model behind an end-to-end pipeline.

AI Road Damage Detection System | Python, TensorFlow, CNN, OpenCV

- Built and deployed a real-time pothole and crack detection model using CNNs and OpenCV image-processing pipelines.
- Achieved 92% accuracy on the KITTI dataset through data augmentation, transfer learning, and hyperparameter tuning.

VisionNet-CIFAR10 — Image Classification | Python, TensorFlow, Keras, CNN

- Designed and trained a CNN to classify CIFAR-10 images, tuning architecture and regularization to improve validation accuracy and reduce overfitting.
- Visualized predictions and confidence scores for model evaluation and error analysis.

SQL Data Warehouse & Analytics Project | T-SQL, Star Schema, SQL Server

- Built an end-to-end data warehouse (Star Schema) modelling fact_sales linked to dim_customers and dim_products, from raw data loading to reporting views.
- Wrote 13+ modular T-SQL scripts covering EDA, ranking analysis, cumulative analysis, and RFM-style segmentation using window functions, CTEs, and CASE logic.

WORK EXPERIENCE

Data Science Intern | RD-Infro-Technology

Jan – Mar 2025

- Developed 4 end-to-end ML pipelines in Python spanning classification, regression, anomaly detection, and time-series forecasting (Fraud Detection, Sales Forecasting, Movie Ratings, Titanic Survival).
- Applied boosting and tree-based models with feature engineering and model evaluation to improve predictive performance; shipped reproducible, version-controlled notebooks.

OPEN SOURCE CONTRIBUTIONS

- TheAlgorithms/Java: Merged code and bug-fix pull requests to one of GitHub's most-starred algorithm repositories (60k+ stars).
- Fossology: Merged open-source contributions; active across 40+ repositories.

EDUCATION

Bachelor of Technology in Computer Science and Engineering (Data Science) — Jain University — SGPA: 9.55 | 2023 – 2027 |

CERTIFICATIONS & ACHIEVEMENTS

- Google Crowdsource Influencer — earned Influencer badge for contributing to Google's AI/ML datasets (image, text, translation).
- Selected for Smart India Hackathon (SIH) 2025 Internal Round.
- IBM SkillsBuild: Data Science 101. Coursera: Algorithms, Operating Systems. Power BI Workshop.