Arnav Sharma

LinkedIn
GitHub

Email: arnav06as@gmail.com
Mobile: +91-8630171733

EDUCATION

Vellore Institute of Technology — Vellore, Tamil Nadu
B.Tech. - Computer Science Engineering; CGPA: 8.88 — Aug 2022 – Present

Cambridge School — Ghaziabad, Uttar Pradesh
CBSE Class 12th; 92% — 2022

Cambridge School — Ghaziabad, Uttar Pradesh
CBSE Class 10th; 95.2% — 2020

CERTIFICATIONS

- **AWS Certified Cloud Practitioner**: Amazon Web Services - 2024
- **Cybersecurity Professional**: Google (Coursera) - In Progress, 2025

EXPERIENCE

Apollo Tyres — Gurugram, India
Machine Learning Intern — May 2025 – July 2025

- **Advanced CNN Fine-Tuning for Tire Defect Prediction**: Fine-tuned EfficientNet-B4 and MobileNetV3-Large on 15,000+ images, achieving 90%+ accuracy across 7 classes; collaborated with engineering team to deploy predictive tool.
- **Production-Scale ML Pipeline**: Engineered ML pipeline automating maintenance for 500+ images/minute using augmentation and cross-validation, reducing downtime by 15% in simulations.
- **Robust Visualization & Documentation**: Created visualizations (confusion matrices, heatmaps) and documentation, presenting to 5+ stakeholders for seamless adoption.

Hudson Data — Delhi
Data Analytics Intern — May 2024 – June 2024

- **Financial Data Analysis**: Analyzed 200K+ financial transactions via exploratory data analysis (EDA) and preprocessing; created interactive dashboards visualizing key metrics, delivering actionable insights to 10+ stakeholders.
- **Hybrid Ensemble Model for Predictive Analytics**: Developed XGBoost, Isolation Forest, and LSTM ensemble for fraud/credit risk, attaining 92% accuracy and reducing false positives by 18%.
- **Explainable AI in Agile Environment**: Applied LIME/SHAP for interpretability in agile sprints, enhancing trust and decision-making for cross-functional teams.

PROJECTS

- **GitGud - AI Interview Coach (LLMs, RAG)**: link - Developed RAG system with semantic embeddings, boosting retrieval accuracy by 30% on 500+ resume-JD pairs; microservices dashboard via FastAPI/LangChain/Pinecone (Beta, 2025).
- **Watch Tower - DePIN Uptime Monitoring (Blockchain, WebSockets)**: link - Built 5-microservice platform on Solana (65K TPS, $0.00025 fees) with real-time WebSockets (2024). Tech: Next.js, TypeScript, Bun, Docker.
- **Emotion Recognition CNN (Computer Vision)**: link - PyTorch CNN on 35K+ images achieving 85% accuracy via EDA/modeling; created a streamlit dashboard (2024). Tech: OpenCV, CUDA.

LEADERSHIP & ACTIVITIES

Senior Finance Executive, AdMark Club — Vellore Institute of Technology

- **Event Management & Sponsorship**: Led 36-hour hackathon for 200+ participants as judge and coordinator; secured Rs 50,000+ in sponsorships through targeted pitches and negotiations, ensuring seamless event execution.
- **Social Media Engagement**: Created compelling social media content that generated 50K+ views, enhancing club visibility and driving participant registrations by 25%.
- **Team Leadership & Mentorship**: Directed a team of 3 juniors in club operations, providing guidance on tasks.

SKILLS

- **Languages**: Python (Advanced), Java, C++, JavaScript, HTML/CSS, SQL
- **ML Frameworks**: PyTorch, TensorFlow, Keras, Scikit-learn, Hugging Face Transformers
- **Data Tools**: - Pandas, NumPy, Matplotlib, LangChain, Pinecone
- **Web/Backend**: Django REST, FastAPI, Next.js, TypeScript
- **Databases & Processing**: PostgreSQL, MongoDB, OCR (PaddleOCR, PyMuPDF), PDF Parsing
- **Cloud/DevOps**: AWS, Docker, Kubernetes, Git, CI/CD
- **Other**: Agile/Scrum, n8n, Linux, Computer Networks, DSA, Blockchain (Solana)