Eshaan Gupta

+91-9810402669 · eshaan.gupta.33@gmail.com · eshaangupta1011.github.io/portfolio/ · EshaanGupta1011 · @eshaan.gupta.33

Summary

AI/ML student skilled in deep learning, CV, and full-stack development. Built scalable apps (Swastha, Vigyaan), achieving 97% accuracy in DR detection. Proficient in TensorFlow, PyTorch, and Docker. Passionate about solving real-world problems through ML.

Education

B.Tech in Artificial Intelligence and Machine Learning *Guru Gobind Singh Indraprastha University, Delhi*
University School of Automation and Robotics
CGPA: 8.79
Relevant Coursework: Machine Learning, Computer Vision, Deep Learning, Reinforcement Learning, Digital Image Processing, Analysis and Design of Algorithm

Class XII & X *Mount St Mary's School, Delhi*
Percentage: 94% (XII), 92% (X)

Experience

Quamin Tech Solutions LLP *Full Stack Web Developer*

- Developed and maintained web applications using the MERN stack (MongoDB, Express.js, React, Node.js).
- Integrated an NLP-based chatbot and market analyzer into the farmer dashboard, boosting user engagement by 20%.

Reliance Power Plant Ltd. *Machine Learning Intern*

- Implemented an LSTM-based grid frequency prediction model, achieving 80% accuracy.
- Conducted exploratory data analysis on power generation datasets, identifying key efficiency patterns.

Association for Computing Machinery, USAR *Frontend Web Developer*

- Created and maintained the official ACM USAR website using Next and Node.js.

Projects

Diabetic Retinopathy Detection GitHub Repository Link

- Engineered a multi-class classification pipeline for detecting Diabetic Retinopathy from retinal fundus images using deep learning models (InceptionV3, EfficientNetV2B0, ResNet18/34/50, ConvNext Small, custom CNN). Achieved 97% accuracy across 5 severity classes, with preprocessing improving model consistency by 3% compared to raw data.

Vigyaan GitHub Repository Link

- Built an end-to-end machine learning platform for users to upload datasets, conduct exploratory data analysis (EDA), and train classification/regression models (e.g., Random Forests, SVM, Neural Networks). Integrated interactive visualizations with Plotly and deployed on an Oracle Cloud Virtual Machine for scalable access.

Swastha Health Live Application Link

- Developed a health monitoring web app used by over 10 individuals to upload medical reports, extract vital signs, and track trends. Secured with hashed passwords, powered by MongoDB, and hosted on Render (backend) and Netlify (frontend), with Docker containerization managed via DockerHub.

Technical Skills

- **Computer Vision and Image Processing:** OpenCV, YOLO, Image Classification, Object Detection, RF DETR.
- **Machine Learning and Deep Learning:** TensorFlow, PyTorch, LSTMs, Reinforcement Learning, CNNs, RNNs, GANs, GNNs, Time Series Forecasting, EDA
- **Programming Languages:** Python, JavaScript
- **Web Development:** React, Node.js, HTML/CSS, REST APIs
- **Tools and Platforms:** Git, Jupyter, Google Colab, Docker, MongoDB, Oracle Cloud

Certifications

- Cyber Security and Ethical Hacking, MSME (2024)
- Artificial Intelligence with Machine Learning, Pregrad (2023)
- Time Series Analysis, Udemy (2023)
- Full Stack Web Development, Udemy (2022)

Honours

- Brij Gala Goel Award for Topper in Mathematics
- 3rd Position, SRM Hackathon
- Top 9, Great Bengaluru Hackathon
- Top 30, Smart India Hackathon, 2023 (Team Leader)
- Top 30, Smart India Hackathon, 2024
- Top 5, The Annual Flagship Hackathon, SGGSCC, 2024