Nevil J

AI & DATA SCIENCE STUDENT | AI & Data Science | Computer Vision + ML Intern | Building for Real World Impact 9342886761 \diamondsuit nevilj22@gmail.com \diamondsuit 7th cross, Sri ram avenue ,Vadavalli, Coimbatore, Tamil Nadu, 641041, India \diamondsuit Open to Remote \diamondsuit Open to On-Site \diamondsuit LinkedIn \diamondsuit GitHub \diamondsuit Portfolio

SUMMARY

AI & DATA SCIENCE STUDENT AI & Data Science | Computer Vision + ML Intern | Building for RealWorld Impact

SUMMARY I'm currently pursuing my B.Tech in Artificial Intelligence & Data Science at KGiSL Institute of Technology (2023-2027). I'm passionate about solving real-world problems in traffic, healthcare, and research automation through intelligent Al systems. I work across the full stack-from building ML models to deploying interactive web apps.

EXPERIENCE

Al Project Intern

Jun '25 — Jul '25

Vision-Language Model Centre for Machine Learning and Intelligence (CMLI)

Coimbatore, India

- Applied OpenAl's CLIP model for breast cancer subtype classification using histopathology images.
- Created prompt-based image-text pairs and fine-tuned CLIP for zero-shot and few
- shot learning
- Evaluated model using accuracy, F1-score, and confusion matrix, demonstrating explainable Al potential.
- Gained experience in multimodal learning, prompt engineering, and healthcare Al.

EDUCATION

B. Tech in Artificial Intelligence & Data Science, KGiSL Institute of Technology (GPA: CGPA-7.1)

May '23 — Present coimbatore, India

Coursework includes Machine Learning, Deep Learning, Data Structures, Big Data, Computer Vision, and Cybersecurity.

Gained hands-on experience in Python, TensorFlow, YOLO, and IoT integration (ESP32-CAM, BeagleBone Black). Active participant in project expos and hackathons, winning multiple awards for innovative AI solutions.

CERTIFICATIONS

AI ML Concepts Object Detection Deep Learning Model Training Image Processing

AWARDS

1st Prize - Ideathon Project Expo

Jan '24

Ideathon & Project Expo

Won for developing a real-time AI-based Traffic Management System using YOLOv5 and embedded hardware (ESP32-CAM + BeagleBone Black).

1st Prize - Project Expo SNS Institute of Technology

SNS Institute of Technology

Jan '24

Recognized for innovation in integrating Computer Vision and loT in urban traffic systems.

Project Approved by Commissioner of Police, Coimbatore

Commissioner of Police, Coimbatore

Jan '24

Smart traffic control solution officially acknowledged for potential deployment.

PROJECTS

AI-Based Traffic Management System, kgisl institute of technology Link

Sep '24 — May '25

• Technologies: YOLOv11s, ESP32-CAM, BeagleBone Black, Python, OpenCV

Objective: Designed a traffic signal control system using real-time detection and tracking of vehicles.

Outcome: Approved by the Commissioner of Police and deployed for live traffic monitoring.

• Duration: Jan 2024 - May 2024

PathoVision: Breast Lesion Classification, Centre for Machine Learning and Intelligence Link

Jun '25 — Jul '25 coimbatore, India

• **Objective:** Applied CLIP and ResNet50 for zero-shot and few-shot classification of breast lesions from histopathology images.

Outcome: Achieved robust interpretability with engineered prompts and evaluated results using accuracy, F1-score, and confusion matrix.

Skills & Tools: CLIP, RN50, PyTorch,

Eco-Friendly Product, kgisl institute of technology Link

- HTML, CSS, Bootstrap
 - Responsive website to promote sustainable products
 - Semantic HTML, mobile-optimized, green UI

Masking Tool for Documents, KGISL Institute of Technology Link

Jul '25 — Aug '25 coimbatore, India

May '25 — Jun '35

coimbatore, India

- Python, Flask, OpenCV, OCR
 - Web app for masking sensitive info in ID document images
 - Utilizes OCR, regex, and CV for privacy protection

SKILLS

Specializations Vision-Language Models for medical image interpretation,

Real-time CV systems using YOLO, OpenCV, and loT (ESP32-CAM),

Document Intelligence using BERT, NLP, and Prompt Engineering, Building full-stack Al systems with responsive Uls, python

Programming Python, JavaScript, HTML/CSS

Tools YOLOv8, TensorFlow, Keras, OpenCV, Flask, Flutter, PostgreSQL, Firebase, Git, Github, Figma (UI Design), Android Studio, VS Code

AI/ML Concepts Object Detection, Deep Learning, Model Training, Image Processing, Optical Character Recognition, natural language processing

Languages Tamil, English