

Mohammad Sami Khan

AI/ML ENGINEER

AI/ML Engineer with hands-on experience in Deep Learning, PyTorch, and Machine Learning. Built projects involving computer vision, image classification, object detection, semantic segmentation, and real-time AI applications using models like YOLO and SegFormer. Seeking an AI/ML internship or fresher roles to apply technical skills and grow in developing intelligent systems.

DEEP LEARNING & MACHINE LEARNING

PyTorch, Machine Learning, Deep Learning, CNNs, Transfer Learning

COMPUTER VISION

OpenCV, YOLO, image classification, object detection and tracking, Semantic Segmentation, Video Analytics

PROGRAMMING & TOOLS

Python, Git/GitHub, SQL

CONTACT

8384856113

samibdn060@gmail.com

linkedin.com/in/samikhxnn

github.com/Samikhxnn

delhi, india

SMART CCTV ANALYTICS SYSTEM

Python • PyTorch • YOLOv11 • OpenCV • Real-Time Object Detection & Tracking

- Developed a real-time video analytics system using Python, PyTorch, YOLO, and OpenCV for person detection, multi-object tracking, crowd monitoring, fire/smoke detection, and intrusion detection.
- Integrated automated Telegram alerts with notifications for security events.
- Designed a modular pipeline supporting multiple computer vision tasks from a single video stream and optimized the inference pipeline for efficient real-time processing.

Github : <https://github.com/Samikhxnn/smart-cctv-analytics>

Demo : <https://www.youtube.com/watch?v=AG-vy-FGsTY>

AUTONOMOUS DRIVING SEMANTIC SEGMENTATION USING SEGFORMER

Python • PyTorch • Hugging Face Transformers • SegFormer • OpenCV

- Fine-tuned a pretrained SegFormer model using PyTorch for multi-class semantic segmentation on urban driving scenes.
- Implemented custom dataset loading, preprocessing, augmentation, evaluation with Mean IoU, and inference for pixel-level scene segmentation.

github : <https://github.com/Samikhxnn/autonomous-driving-semantic-segmentation-segformer>

Demo : <https://www.youtube.com/watch?v=GBAlXiaByxA>

REAL TIME HAND SIGNS DETECTION

Python • PyTorch • YOLOv11 • OpenCV

- Developed a real-time hand sign detection system using YOLOv11, PyTorch, and OpenCV for live gesture recognition from webcam input.
- Implemented real-time video processing, object detection, and visualization pipeline for accurate hand sign classification.

Github : <https://github.com/Samikhxnn/real-time-hand-signs-detection>

Demo : <https://www.youtube.com/watch?v=GBAlXiaByxA>

CUSTOM DATASET IMAGE CLASSIFICATION

Python • PyTorch • VGG16 • Transfer Learning • image classification

- Fine-tuned a pretrained VGG16 model with PyTorch for custom dataset image classification using transfer learning and deep learning techniques.

Github : https://github.com/Samikhxnn/customdataset_pytorch_classifier

EDUCATION

- Dr. Islam Majeed College, Bhargain
- Blooming Dale School, Budaun
- Depaul School Budaun

CERTIFICATIONS

- Artificial Intelligence & Machine Learning Certification – Tech Stack Academy

LANGUAGES

- English - Working Proficiency
- Hindi - Native Proficiency
- Urdu - Native Proficiency

TECHNICAL
SKILLS

PROJECTS