

COMPUTER VISION & INTELLIGENT SYSTEMS PROFESSIONAL TRACK

Master image processing, computer vision, deep learning, and edge AI.



**BUILD PRODUCTION-READY VISION SYSTEMS USING
OPENCV, YOLOV8, PYTORCH, TENSORRT, NVIDIA
JETSON, AND MODERN DEPLOYMENT PIPELINES.**

PROFESSIONAL PROGRAM • 6 MONTHS

COMPUTER VISION & INTELLIGENT SYSTEMS PROFESSIONAL TRACK

Master image processing, computer vision, deep learning, and edge AI.

DURATION:
6 MONTHS • 10+ LAB HOURS

FORMAT & MODE
HYBRID LMS + LIVE

SKILL LEVEL
GRADUATE / PROFESSIONAL

COMPUTER VISION SPECIALIZATION TRACKS

Master four industry-focused specializations designed for real-world Computer Vision and AI engineering

Track 01 Image Processing Specialist using OpenCV

Learn classical image processing, enhancement, segmentation, filtering, and industrial inspection using OpenCV.

- OpenCV Programming
- Image Enhancement & Segmentation
- Video Processing & Inspection

Track 02 Computer Vision Engineering

Master neural architectures, TensorFlow, PyTorch, computer vision, object detection, and speech models.

- Core Java fundamentals
- SQL, PostgreSQL, Database Design
- Spring Boot, REST APIs, Security
- (JWT/OAuth2)

Track 03 Deep Learning for Computer Vision

Train and deploy advanced neural networks for image classification, segmentation, and detection.

- CNNs & Transfer Learning
- Vision Transformers
- Model Deployment

Track 04 Edge AI Engineering

Optimize and deploy real-time vision applications on NVIDIA Jetson and embedded AI platforms.

- TensorRT Optimization
- NVIDIA Jetson Deployment
- Edge AI Performance Tuning

INDUSTRY-GRADE TOOLCHAIN YOU'LL MASTER

'PYTHON', 'OPENCV', 'PYTORCH', 'YOLOV8', 'TENSORRT', 'ONNX', 'NVIDIA
JETSON', 'DOCKER', 'EASYOCR', 'PADDLEOCR', 'VISION TRANSFORMERS', 'CUDA'

TRACK 01 IMAGE PROCESSING SPECIALIST USING OPENCV

Image Processing Fundamentals

- checkDigital Images and Pixels
- checkPixels & Color Models
- checkImage Formats & NumPy Basics

OpenCV Programming

- checkImage Reading/Writing
- checkDrawing APIs & ROI Operations
- checkGeometric Transformations

Image Enhancement

- checkHistogram Equalization
- checkBlurring & Sharpening
- checkThresholding Techniques

Feature Extraction

- checkEdge Detection
- checkMorphology & Contours
- checkCorner Detection



Capstone Milestone 1: AI Image Enhancement Suite

Build an integrated application combining enhancement, segmentation, OCR, and batch image processing.

TRACK 02 COMPUTER VISION ENGINEERING

Computer Vision Fundamentals

- checkCamera Models
- checkImage Acquisition
- checkCamera Calibration

Face Analytics

- checkFace Detection
- checkFace Recognition
- checkFace Mesh

Object Detection

- checkYOLOv8
- checkSSD
- checkFaster R-CNN

Object Tracking

- checkDeepSORT
- checkByteTrack
- checkSORT



Capstone Milestone: Multi-Camera Analytics Pipeline

Develop a production-ready surveillance and analytics platform with detection, tracking, OCR, and dashboard visualization.

TRACK 03 DEEP LEARNING FOR COMPUTER VISION

Deep Learning Foundations

- checkANN Fundamentals
- checkBackpropagation
- checkGradient Descent

CNNs

- checkCNN Architecture
- checkPooling
- checkRegularization

Transfer Learning

- checkVGG16
- checkResNet
- checkEfficientNet

Vision Transformers

- checkViT
- checkAttention Mechanisms
- checkTransformers



Capstone Milestone: AI Vision Web Application

Train, optimize, convert, and deploy deep learning models using ONNX, TensorRT, and FastAPI.

TRACK 04 EDGE AI ENGINEERING

Edge AI Basics

- checkNVIDIA Jetson
- checkHardware Setup
- checkEdge Computing

CUDA Programming

- checkCUDA
- checkcuDNN
- checkGPU Processing

TensorRT Optimization

- checkModel Conversion
- checkInference Optimization

Deployment

- checkONNX
- checkTensorRT Engine
- checkCustom Model Deployment



Capstone Milestone: Jetson-Based Smart Vision System

Deploy an optimized real-time vision application on NVIDIA Jetson with performance benchmarking and edge inference.

BRIDGE THE GAP FROM LEARNING AI TO PRODUCTION-READY COMPUTER VISION ENGINEER

Transform from learning isolated AI concepts to building and deploying real-world Computer Vision solutions in just 12 weeks.



WHERE YOU START

01 | Limited Practical AI Experience

Mostly theory with little real-world implementation.

02 | No End-to-End Projects

Difficulty integrating detection, tracking, OCR, and deployment

03 | Limited Deployment Skills

Unable to optimize AI models for production environments.



WHERE YOU'LL BE

✓ Computer Vision Engineer

Build complete AI-powered vision applications from scratch..

✓ Production-Ready Edge AI Expert

Deploy optimized AI models on NVIDIA Jetson using TensorRT and ONNX.

✓ Production AI Portfolio

Showcase **5+** production-grade Computer Vision projects to recruiters.

**READY TO MAKE THIS TRANSFORMATION ?
JOIN 2,400+ ENGINEERS WHO ALREADY MADE THE LEAP.**

INSIGHTS FROM OUR INTERNS

TRUSTED BY 8,880+ ON GOOGLE

YOLOv8 Expert in
12 Weeks



"The hands-on projects made object detection and deep learning deployment easy to understand."

RIYA M.

From Beginner to
Vision Engineer



"The OpenCV and image processing modules helped me confidently build real-time AI applications."

VARUN S

Real-Time AI Deployment



"I successfully optimized and deployed TensorRT models on NVIDIA Jetson for industrial applications."

KABIR J

From Web Developer
to AI Engineer



"I transitioned from web development into Computer Vision with a portfolio of production-ready projects."

TANVI N

Industrial Vision
Specialist



"The defect detection and OCR projects gave me practical experience that employers were looking for."

DEV PRAKASH

Mechanical Engineer to
AI Engineer



"transformed my mechanical engineering background into a successful Computer Vision career."

SIDDHARTH

HYBRID TRAINING EXPERIENCE

Seamlessly blend online theoretical depth with offline real-world practicals. Build and deploy intelligent vision systems with hands-on exposure to cameras, edge devices, live detection projects, and internship opportunities.



ONLINE + OFFLINE LABS
LIVE SESSIONS PAIRED WITH IN-
LAB CODING PRACTICALS.
TERMINAL



WORK WITH CAMERAS, EDGE AI
BOARDS, AND LIVE OBJECT
DETECTION PROJECTS.



INTERNSHIP OPPORTUNITIES
APPLY YOUR SKILLS WITH AI
ENGINEERING TEAMS.

EARN PRESTIGIOUS VERIFIABLE CREDENTIALS

Your certification formally validates your skill set in recruiter searches.



VERIFIABLE CREDENTIALS TOKEN

Unique cryptographic hashes
registered on global validation boards.



PREMIUM LINKEDIN INTEGRATIONS

Add directly to your credentials
panel with pre-filled ID tracking.

PROGRAM INVESTMENT

Live Masterclasses & Q&A
Industry Expert Instructors
Practical Case Studies

Transform your skills into **industry-ready Computer Vision & Intelligent Systems expertise**. Learn OpenCV, YOLOv8, PyTorch, TensorRT, and Edge AI by building production-grade applications that employers value.

**READY TO BUILD
PRODUCTION-
READY
AI VISION
SYSTEMS?**

- 6 MONTHS
- 240+ LAB HOURS
- Flexible 0% EMI Options

INR 8474^{+GST}

TOTAL INR 59,999*
(INCLUSIVE OF TAXES)



CONTACT US

SRINIVASAN N 98409 74407
KUMARASAMY R 95661 33338