JYOTI KINI

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EDUCATION

Doctor of Philosophy in Computer Science
University of Central Florida — Orlando, US
May 2018 – Dec 2025 (CGPA: 3.77/4)
Segmentation, Tracking, 3D Point Cloud, Transformers, Multimodal, VLMs, Aerial

Master of Science in Computer Science
University of Central Florida — Orlando, US
Aug 2016 – May 2018 (CGPA: 3.8/4)
Computer Vision, Machine Learning, Natural Language Processing, Artificial Intelligence

Bachelor of Technology in Electronics & Communication
Usha Mittal Institute of Technology — Mumbai, India
Aug 2008 – May 2012 (CGPA: 3.64/4)

EXPERIENCE

Applied Research Scientist
Mila — Jan 2026 – Present — Montreal, Canada
- Built LLM-as-a-judge evaluation for AI-generated healthcare plans
- Collaborated on designing RAG evaluation framework for banking chatbot

Senior Research Engineer
PlusAI — May 2025 – Jan 2026 — Santa Clara, US
- Improved multi-agent motion forecasting with Frenet S-L features and kinematic/map constraints (off-road penalties, collision loss, speed limits, velocity consistency)
- Developed goal-conditioned multi-agent trajectory prediction
- Implemented planning-oriented end-to-end stack by coupling perception, prediction, and planning for interaction-aware ego and agent trajectory generation

Research Intern
PlusAI — Mar 2025 – May 2025 — Santa Clara, US
- Fused Bird's-Eye View (BEV) features with agent and lane encodings in the prediction stack for map-aware trajectory forecasting

Research Intern
Waymo — May 2024 – Aug 2024 — Mountain View, US
- Worked on temporal representation learning via BEV future frame prediction
- Evaluated the impact of self-supervised learning on downstream tasks, including occupancy prediction, semantic segmentation, and pedestrian and vehicle detection
- Conducted latent space analysis across multiple modalities, namely camera and LiDAR

Research Intern
SRI International — May 2022 – Aug 2022 — Princeton, US (Remote)
- Employed class-based weak supervision for Point Cloud Semantic Segmentation on SemanticKITTI, NuScenes, DALES datasets, using underlying Kubernetes infrastructure
- Conducted a comprehensive review of Transformer Network-based 3D Point Cloud Compression techniques

Software Engineering Intern – Artificial Intelligence
Royal Bank of Canada — Aug 2017 – Apr 2018 — Orlando, US
- Implemented transactional data enrichment component powered by ensemble of deep learning models, using Keras, Seaborn visualization
- Contributed to research on anomaly detection pipeline, using TensorFlow, Auto-encoders, Spark, AWS–EMR, EC2, Lambda, Kinesis

Software Engineering Intern
Thales Avionics — May 2017 – Aug 2017 — Melbourne, US
- Contributed to data pipeline implementation for flight tracking services, using SOAP APIs, Windows Services, Hadoop Kafka, Elmah Error Logger, Swagger

Software Developer and Technical Consultant
Hewlett Packard Enterprise — Apr 2015 – Jul 2016 — Bangalore, India
- Developed Business Intelligence Reporting Tool, using REST, Windows Services
- Formulated Incident Monitoring Tool, using MVC4, AJAX, MS SQL Server

Software Engineer
Larsen & Toubro Infotech — Mar 2013 – Apr 2015 — Pune, India
- Developed corporate portal, using JSF, JSP, Struts 2, PrimeFaces, ODBC, MYSQL

TECHNICAL SKILLS

Python | PyTorch | TensorFlow | Keras | OpenCV | MATLAB | Ray | MLflow | Docker | Anyscale | Grafana | MinIO | Pydantic | JavaScript | AngularJS | REST | SQL

RESEARCH

Publications
- *Intent3D: 3D Object Detection in RGB-D Scans Based on Human Intention* — ICLR '25
- *CT-VOS: Cutout Prediction and Tagging for Self-Supervised Video Object Segmentation* — CVIU '23
- *3DMODT: Attention-Guided Affinities for Joint Detection & Tracking in 3D Point Clouds* — ICRA '23
- *Self-Supervised Learning for Multiple Object Tracking in 3D Point Clouds* — IROS '22
- *Florida Wildlife Camera Trap Dataset* — CVPR-W '21

Graduate Funding
Multi-object tracking in 3D point clouds supported by Lockheed Martin Corporate Engineering

Collaborations
- Multi-task perception pipeline for firefighting drone autonomy with Seneca
- LLM-as-a-judge evaluation of healthcare plans on AlayaCare systems
- RAG evaluation framework for BNP Paribas banking chatbot

Mentoring & Teaching
- NSF-REU Program — 2019-23
- Programming labs: C, Data Structures and Algorithms

RECOGNITION

Dean's Dissertation Completion Fellowship
University of Central Florida — 2025

Challenge Winner - Multimodal Action Recognition on the MECCANO Dataset
ICIAP Workshop — 2023

Conference Awards
- ICRA RAS Travel Grant — 2023
- UCF Graduate Presentation Fellowship — 2023
- UCF Conference Registration & Travel — 2022

Challenge Winner - Stanford's JackRabbot Dataset 3D Tracking Competition
CVPR Workshop — 2021

ORC Doctoral Fellowship
University of Central Florida — 2018

Star Performer - Business Intelligence Reporting Automation
Hewlett Packard Enterprise — 2015

Hewlett Packard Merit Award
Hewlett Packard Enterprise — 2015