Kamalam Sai Sivakumar

KamalamSivakumar | kamalamsivakumar | ks7665@nyu.edu | +1(929)-663-7452

Education

M.S. Robotics - New York University (*Aug 2025–Present | CGPA: 3.5/4.0)*
Relevant coursework: Robotics Foundations, Mechatronics, Reinforcement Learning & Control

M.Sc. Data Science - PSG College of Technology (*2017–2022 | CGPA: 3.6/4.0)*
Relevant coursework: Calculus, Graph Theory, Statistics, Stochastic Modeling, ML, DL, Randomized Algorithms

Skills

Core Competencies: Deep Learning, Computer Vision, Reinforcement Learning, Multimodal AI, Data Analysis, Feature Engineering and Control Systems

Tools & Simulation: scikit-learn, PyTorch, TensorFlow, Keras, LangChain, LangGraph, MATLAB, Simulink, ROS2, MuJoCo,

Programming: Python, C, C++, SQL, API design & implementation, Linux, Docker

Work Experience

AI/ML Researcher - Kryptos Technologies, India May 2024 - Apr 2025

- Transitioned research prototypes into deployable cloud-based solutions, bridging ML research with production-grade infrastructure.
- Developed a multimodal retrieval framework using CLIP to align visual and textual embeddings, integrating keyword-aware semantic retrieval to improve efficiency in creative and design workflows.

Business Analyst - Everstage, India Oct 2023 - Mar 2024

Prepared reports and insights for stakeholders and assisted in streamlining workflows with RevOps.

Consultant - KPMG, India Jan 2022 - Aug 2023

- Built an automation framework in Python and Alteryx to streamline large scale audit processes reducing runtime from 2 days to 10 minutes while collaborating with auditors to enhance and improve the usability.
- Architected a streaming data ingestion and analytics pipeline on AWS for real-time monitoring of insights.

ERS Team Intern - HCL, India Jul 2020 - Oct 2020

Optimized customer inventory using price-comparison logic, reducing procurement costs and improving purchasing efficiency.

Projects

Inverted Pendulum – Controller Design

Modeled and linearized an inverted pendulum and angular position system using Lagrangian dynamics and designed a cascade loop-shaped controller, validated through MATLAB/Simulink simulations.

ClipSearch - Kryptos Technologies

Built CLIP-based image retrieval system with Azure, cutting design search time and boosting productivity.

RecommEngine (link)

Worked on improving a personalized recommendation system by better modeling user preferences to enhance recommendation accuracy.

Scheduler (link)

Reinforcement Learning based task scheduling on available CPU and Memory.