

NIRANJAN KRISHNA

Software Engineer with 5 years of experience across AI, Robotics and Architecture

niranjankrishna.acad@gmail.com • [LinkedIn](#) • [GitHub](#)

EXPERIENCE

Application Engineer, Formant

Nov 2022 — Apr 2025

- Led development of the core fleet management portal, contributing to 20–30% of Formant's total revenue, with 99.8% uptime for managing 20,000+ production robots.
- Engineered and documented core libraries and pipelines (Python, Go, gRPC, ROS2) for real-time robot control and communication, enhancing CSAT to >92%.
- Built fault-tolerant data ingestion pipelines, processing 500,000+ records per month and reducing ingestion times from 15 minutes to sub-second latency.
- Developed performance analytics tools using Snowflake and Python, processing 1M+ data points in real time with minimal latency for actionable operational insights.

AI Engineer, Reknow.ai

Nov 2021 — Apr 2022

- Fine-tuned GPT-J language models locally in Python for chatbot applications, achieving cost savings of over \$200k.
- Designed clustering-based QA models in PyTorch for user query resolution, achieving 85% accurate resolution of user queries.

Lead Software Engineer, FindMonster

Jan 2021 — Jul 2021

- Created AR gameplay experiences using Niantic ARKit, incorporating real-world environmental awareness.
- Implemented semantic segmentation models to identify and classify natural objects for accurate AR object placement with an IoU score > 0.7.

Lead Software Engineer, TheGGLife

Jan 2020 — Dec 2020

- Engineered server architecture in Node.js for live streaming, supporting real-time interaction for games with audiences averaging 150k+ concurrently via WebSockets.
- Developed Unity-based multiplayer games with live-stream integration, incorporating NLP for command-to-gameplay translation in PyTorch with 94% classification accuracy.

PROJECTS

LedPulse – AI-Powered Computational Art Installation

Dec 2024

- Developed an AI pipeline in Python for Dragon, LedPulse's volumetric display, using small language models to transform speech into real-time abstract musical visuals based on emotional and tonal analysis.

PUBLICATIONS

- "Classier Guided Diffusion for Image Inpainting. Applications to Fine Art", Accepted at LXAI at ICML 2022

SKILLS

- Languages: Python, C++, Go, C#, SQL
- Frameworks & Libraries: ROS2 (Nav2, tf2), gRPC, Protobuf, React, Django, PyTorch, TensorFlow
- Infrastructure: Docker, Kubernetes, AWS (EC2, S3, IoT Core), Terraform, Prometheus
- Misc: Snowflake, MQTT, Redis, GitHub Actions, Celery, PostgreSQL, hardware-in-the-loop (HIL) testing