# Niranjan Krishna

niranjankrishna.acad@gmail.com | <u>linkedin.com/in/theniru</u> | <u>github.com/niranjanorkat</u>
Software Engineer with 4+ years of experience, with expertise in Python (backend development, data analysis) and
TypeScript/JavaScript (frontend development).

# Experience

#### **Formant**

Application Engineer (Nov 2022 – Apr 2025)

- Developed onboard robotics libraries in Python using asynchronous low-level networking (gRPC), deployed across providers operating fleets of 20,000+ robots.
- Engineered performance analytics tools capable of processing upwards of 1 million Snowflake data points with no performance overhead in Python.
- Led core contributions to a comprehensive fleet robotics portal for a global robotics provider, working extensively on the TypeScript (React) frontend

### Reknow.ai

AI Engineer (*Nov 2021 - Apr 2022*)

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

#### **FindMonster**

Lead Software Engineer (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 (intersection-over-union) score of >0.7.

#### **TheGGLife**

Lead Software Engineer (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.
- Presented on the main stage at Future Unfold 2024 as part of the Dragon showcase.

## **Publications**

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

# **Skills**

Languages: Python, TypeScript, JavaScript, SCSS, SQL.

Frameworks & Libraries: React, Next.js, Django, Flask, Vite, PyTorch, Unity.

 $Technologies: REST\ APIs,\ WebSockets,\ gRPC,\ Snowflake,\ Docker,\ Niantic\ ARK it.$ 

Tools: Git, Linux, CI/CD, Snowflake, Node.js.