

Lucas Loh

858-226-3925 | lxiaan27@gmail.com | [linkedin.com/in/xi-aan-lucas-loh](https://www.linkedin.com/in/xi-aan-lucas-loh) | github.com/lxiaan

EDUCATION

Northwestern University

Evanston, IL

B.S. in Computer Science

Sept. 2023 - June 2027

- **GPA: 3.9/4.0**; Dean's List; Murphy Scholar
- **Courses:** Agent AI, Deep Learning, Operating Systems, Distributed Systems, Databases, Data Structures/Algos

EXPERIENCE

Software Engineering Intern - Applied Computer Vision (Incoming)

June 2026 – Sept. 2026

Niantic Spatial

San Francisco, CA

- Incoming SWE Intern on Visual Positioning Systems and 3D Gaussian Splatting for large-scale 3D mapping

Software Engineering Intern (AI/ML)

Apr. 2026 – June 2026

Different.ai (Stealth)

Remote, US

- Built automated ad generation pipeline (**Whisper, Qwen3, FFmpeg**), transforming long-form content into short LinkedIn ads with captions and persona-targeting; reducing editing time from **2 hours to 10 mins**

Research Intern

Jan. 2025 – Present

SPICE Lab

Evanston, IL

- Led development of large-scale ML pipeline, generating 1+ TB of pose datasets for training and evaluation
- Built 3D vision pipeline (**PyTorch, OpenCV**) to reconstruct parametric human models from multi-view video
- Co-authored papers submitted to UIST and UbiComp 2026; received CRA national undergraduate research award

Software Engineer

Apr. 2024 – Apr. 2025

Lopez Research Group

Evanston, IL

- Deployed robot automation framework for battery synthesis, reducing manual work by 20+ hours/week
- Developed GUI (**Flask, MongoDB**) for experiment scheduling, integrating hardware APIs and data pipelines

Software Engineering Intern

Sep. 2022 – June 2023

Finexus Group

Kuala Lumpur, Malaysia

- Developed **OpenCV** and NLP pipelines for customer verification, 1,000+ applications/day with 93% accuracy
- Deployed audio summarization microservice (**Whisper, BART**), cutting meeting review time by 50%

Teaching Assistant

Apr. 2025 – Present

Northwestern University

Evanston, IL

- Fine-tuned LLM autograders (**PyTorch**) to generate grades/feedback (3.6% error), doubling as case studies
- Mentored 170+ students in premier ML course, held 40+ office hours; assisted with assignment creation/grading

PROJECTS

StockSage - News-based Stock Advisor | *React, Python, AWS, MySQL, Gemini*

Apr. 2025 - Sept. 2025

- Built event-driven analytics system ingesting 1,000+ articles/day and generating structured insights via Gemini
- Designed cloud-based event pipelines (**AWS Lambda, EventBridge, SNS**) to deliver scheduled user alerts

Raft Consensus Service | *Go*

Apr. 2025 – June 2025

- Engineered a strongly consistent distributed system by implementing the Raft consensus algorithm, maintaining state across a **5** node cluster, handling **2** concurrent failures with downtimes less than **150ms**
- Integrated the **Chandy-Lamport** algorithm to capture consistent global snapshots, improving recoverability

DBMS Components | *C++, GoogleTest*

Jan. 2025 – Mar. 2025

- Optimized database system of 10,000+ pages by building a **multi-threaded** buffer pool manager with LRU-K eviction and B+ tree indexing with **concurrency**, optimizing memory usage and enabling rapid lookups

SKILLS

Languages: Python, C++, JavaScript, Go, SQL

Frameworks & Libraries: React, Node.js, Flask, FastAPI, Pandas, GTest

Technologies: PostgreSQL, MongoDB, AWS, Docker, REST APIs, Git, Unix/Linux

AI/ML: PyTorch, transformers, Tensorflow, Scikit-learn, NumPy, OpenCV