

Mateo del Rio Lanse

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EDUCATION

Cornell University, College of Engineering

B.S. Electrical & Computer Engineering (GPA: 3.75 / 4.00)

Ithaca, New York

Expected Graduation: Dec. 2028

EXPERIENCE

Options Technology

New York, New York

Software Engineering Intern, PrivateMind Platform

June 2026 – Present

- Developing AI infrastructure for T1 financial institutions with hardware-isolated, zero-trust boundaries.
- Deploying distributed systems to serve frontier open-weight models across NVIDIA B300/B200 GPUs.
- Shipped a batch inference API for high-throughput offline workloads and implemented image generation.
- Built a persistent memory layer that hands users fine-grained control over what their agents remember.

Cornell University

Ithaca, New York

Engineering Manager & ML Engineer, Generative AI at Cornell

Oct. 2025 – Present

- Led 8-person engineering team in building an ESG risk monitoring platform for Investcorp (\$60B+ AUM), driving engineering while coordinating with stakeholders worldwide (Feb. 2026 - May 2026).
- Implemented vendor due diligence agentic pipeline with fintech company QuickFi (Sept. 2025 - Dec. 2025).

Undergraduate Research Assistant, Cornell NLP Group

Oct. 2025 – Present

- Collaborated with a PhD researcher in Cornell NLP Group on LLM safety alignment.
- Engineered pipeline to evaluate safety-alignment across frontier models in adversarial prompt settings.
- Worked with B200-class GPUs to run LLMs locally, using tools like vLLM and SGLang.

Hospital for Special Surgery

New York, New York

Machine Learning Research Intern

Jun. 2024 – Aug. 2024

- Collaborated with Dr. Amit Lakhanpal to analyze immunological datasets and extract clinical insights.
- Generated protein embeddings using Meta's ESM model to support rheumatoid arthritis treatment research.

PROJECTS

Dispatch

[Pitch Deck](#) | [GitHub](#)

- Built an agentic pentesting platform that converts vulnerability findings into ready-to-merge GitHub PRs.
- Orchestrated security agents using Mastra and OpenRouter, with isolated execution via Blaxel Sandboxes.
- Designed Slackbot and Datadog middleware for triggering scans and ingesting logs to surface findings.

Open Weight, Open Risk

[Publication](#) | [GitHub](#)

- Introduced training-free jailbreak in which an uncensored model steers the target's chain-of-thought reasoning, achieving near-universal compliance across open-weight models (DeepSeek, Kimi, GLM, Qwen).
- Designed iterative prompt injection and LLM-as-judge pipelines to streamline evaluation of 15 frontier models across 800 WMDP-derived biosecurity and chemical security requests.

Debately

[Website](#) | [GitHub](#)

- Built a moderated, unbiased debate platform that leverages organized layouts and AI summaries.
- Engineered fact-checking pipelines with web data normalization, preventing hallucinations in consensus.
- Built an LLM-driven consensus tracker using Anthropic API, Supabase, and Vercel/Railway.

TensorAtelier

[GitHub](#)

- Designed PyTorch interface with automatic optimization and profiling to reduce boilerplate in ML research.
- Built pluggable architecture featuring configurable multi-accelerator support and automatic data splitting.

ENDORSEMENTS & AWARDS

Cornell AI Hackathon (2026) – Best Developer Tool

- Built Dispatch, an agentic penetration testing platform automating vulnerability detection and remediation.
- Developed integrations with Datadog, Slack, and Linear for seamless integration with developer workflows.

2x Regeneron WESEF (2024 & 2025) – 2nd Place in Computer Science

SKILLS

Languages: TypeScript, Python, Rust, C++, C, R, CUDA C++

Technologies: Kubernetes, Openshift, Helm, vLLM, SGLang, Supabase, PostgreSQL, Vercel, React, Cloudflare