

Lucas Carlos Casas

lcc79@cornell.edu
+1 (305) 849-7280

<https://lccasasp.github.io>

Ithaca, NY 14853
1 Forest Park Ln

EDUCATION

Cornell University, College of Engineering – Ithaca, NY
B.S. – **Computer Science**, Minors in Artificial Intelligence, Business

Expected May 2026

Relevant Coursework:

CS 2110: Data structures and algorithms (Java), **CS 2800:** Discrete structures, **CS 3110:** Data Structures & Functional Programming (OCaml), **CS 3410:** Computer Systems, **CS 4700:** Foundations of AI, **CS 4701:** Practicum in AI, **CS 4820:** Intro to Analysis of Algorithms, **BTRY 3080:** Probability Models and Inference, **CS 4780:** Machine Learning, **Other:** Calculus 1-3 & Linear Algebra

PROJECTS & WORK EXPERIENCE

Lockheed Martin, *Software Engineering Intern*

June - August 2024

- Shipped product for an undisclosed website using Angular, .NET, and C#.
- Created new generative AI service in C# to interact with Lockheed Martin data and generate insights.
- Collaborated in a team on a large-sized project leveraging git workflows and the AGILE methodology.

Palantir Technologies, *Palantir Launch*

March 2024

- Mentored by Palantir engineers to work and learn about the Palantir AIP (Artificial Intelligence Platform).
- Engaged in learning workshops to improve technical interview and collaborative software skills.
- Faced a vaccine distribution simulation, leveraging Palantir Foundry, AIP, and Typescript to visualize and solve.

Flare, *Founder*

March 2023 - Present

- Architected and developed Flare, an innovative open-source Python tool that aggregates energy and climate news from diverse sources, centralizing them into an SQLite3 database for easy access.
- Implemented advanced search capabilities leveraging Elasticsearch and Lucene, enhancing user experience through keyword matching, date filters, and a truthfulness algorithm that cross-references articles with IPCC climate report.
- Enhanced Flare's NLP capabilities through meticulous text preprocessing and machine learning techniques.

Ventures Accelerated, *Software Fellow*

Sep. 2023 - Present

- Served as a technical liaison between Ventures Accelerated and participating startups.
- Collaborated with a dynamic team of entrepreneurs, providing software solutions tailored to startup requirements.
- Integrated the backend using AWS Lambda, improving API response speed by ~30% from the Flask counterpart.

Cornell Hitch, *Cornell AppDev Hackathon Runner-Up Back-end Developer*

Dec. 2022

- Developed a Flask REST API application with Python to handle ridesharing to airports for Cornell students.
- Won the second-place award out of ~120 peers for best backend.
- Created a secure student authentication API with OAuth, SQL, and Alchemy.
- Collaborated in a team of three, using Git for DevOps, resulting in a cohesive frontend-backend pipeline.

McDiver

May 2023

- Reduced Dijkstra's algorithm to solve a maze problem in Java, with an algorithm ranked 12th out of 620 students.

SKILLS

PROGRAMMING: Python, Java, Typescript, C#, OCaml, Rust, JavaScript, SQL, (Familiar) C++

LIBRARIES/FW: Reactjs, Nodejs, Docker, Elastic, SQLAlchemy, OAuth, Flask, REST APIs, Git, GCP, AWS, LaTeX

LANGUAGES: Spanish (native), English (native), Catalan (proficient)

LEADERSHIP

Sin Fronteras Club, *President*

- Organized the running, financing, planning, and coordination of all campus events related to Hispanic culture.

Cornell Prepare, *Prepare Mentor*

- Led and mentored a diverse group of international incoming students, facilitating transition to Cornell by organizing orientation activities, fostering a welcoming environment, and addressing cultural acclimation challenges.