

Sylvester Elorm Kpei

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EDUCATION

Cornell University

Bachelor of Arts in Computer Science

Ithaca, NY

Expected May 2028

Relevant Coursework: Data Structures & Algorithms, Object-Oriented Programming, Computer Systems Programming, Software Engineering, Database Systems, Machine Learning, Linear Algebra

EXPERIENCE

African Languages Lab

Software & Data Engineering Intern

Madison, WI

May 2025 – Present

- Built end-to-end NLP data pipeline processing 10,000+ Malagasy sentences through web scraping, regex cleaning, and pattern analysis, creating structured datasets for language research supporting 18M+ native speakers
- Engineered automated text extraction workflows using Python, BeautifulSoup, and regex, reducing manual data collection by 80% for endangered African language preservation projects

NVIDIA

Software Engineering Fellow

Santa Clara, CA

June 2025 – Present

- Completed the NVIDIA Summer Bridge Program, a 3-part technical series led by 10+ senior engineers, with in-depth sessions on CUDA, GPU architecture, and scalable AI infrastructure
- Explored real-world engineering challenges powering NVIDIA's breakthroughs in deep learning, robotics, and graphics, gaining first hand insight into product development at global scale

Jane Street

Software Engineering Fellow

New York City, NY

May 2025

- Selected as 1 of 51 students nationwide (from 1,000+ applicants) for Jane Street's FOCUS Program, centered on software engineering, functional programming, and large-scale systems
- Completed 10+ hours of technical workshops and collaborative challenges, including hands-on experience with OCaml to simulate real-time trading infrastructure

GhCode Foundation

Founder

Kumasi, Ghana

October 2023 – Present

- Founded a tech-education foundation that empowered 500+ students by developing a full-stack learning management system with React, Node.js, and Firebase, reducing onboarding time by 50%
- Created automated grading scripts in Python, increasing grading accuracy by 30% and scalability by 40%

PROJECTS

RoadBuddy

- Created intercity carpooling platform where drivers post future trips with flexible pricing for 100+ mile journeys, built with Swift/SwiftUI and Python Flask supporting 40+ REST endpoints with 95% uptime
- Implemented Stripe payments, 5-star ratings, real-time GPS tracking, and in-app messaging across 8 mobile screens, reducing intercity travel costs by 60% through efficient ride-sharing

SilverStore

- Built secure e-commerce platform handling 30+ orders with integrated payment processing and automated inventory management, reducing manual oversight by 80%
- Engineered AI recommendation system achieving 94% accuracy using collaborative filtering, increasing user engagement by 76% through real-time preference learning

Ithaca Weather Intelligence Dashboard

- Built interactive weather analytics platform with Python, Dash, and Plotly, processing real-time data from 4 locations with automated collection and cloud deployment
- Developed predictive algorithms improving weather preparedness accuracy by 40% and solving unpredictability challenges for 30,000+ Ithaca residents

TECHNICAL SKILLS

Languages: Python, Java, R, C++, JavaScript(ES6), OCaml, Swift, SQL

Tools & Frameworks: Git, React.js, Node.js, EC2, S3, Express.js, RESTful APIs, Docker, PostgreSQL

CAMPUS INVOLVEMENT

Underrepresented Minorities in Computing - Freshman Rep

Big Red Hacks - Workshop Organizer

Cornell Data Science Club - Project Team Member

National Society for Black Engineers - Peer Mentor