Sylvester Elorm Kpei

 $\underline{607\text{-}339\text{-}9886} \mid \underline{\text{sek266@cornell.edu}} \mid \underline{\text{https://linkedin.com/in/ks200}} \mid \underline{\text{https://github.com/kpeis695}} \mid \underline{\text{https://kpeis695.github.io}}$ 

#### EDUCATION

### Cornell University

Ithaca, NY

Bachelor of Arts in Computer Science

Expected May 2028

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

#### TECHNICAL SKILLS

Languages: Python, Java, R, C++, JavaScript(ES6), OCaml, Swift, SQL, HTML, CSS, Ruby, Perl

Tools & Frameworks: GitHub, React.js, Node.js, AWS(EC2), MongoDB, Express.js, RESTful APIs, Docker, PostgreSQL,

PyTorch, CUDA, Open Source, Linux kernel

# EXPERIENCE

# African Languages Lab

Madison, WI

Software & Data Engineering Intern

May 2025 - August 2025

- Built AI translation models for African languages to English using NLP pipelines, processing 10,000+ Malagasy sentences through automated data pipelines and supporting language research for 18M+ native speakers
- Developed web scraping workflows using Python and BeautifulSoup, reducing manual data collection by 80% and accelerating AI training for endangered African language preservation

### **NVIDIA**

Santa Clara, CA

Software Engineering Fellow

June 2025 - August 2025

- Explored CUDA, GPU architecture, and scalable AI infrastructure through NVIDIA's 3-part Summer Bridge Program led by 10+ senior engineers, gaining hands-on experience with GPU computing technologies
- Analyzed engineering challenges in deep learning, robotics, and graphics projects, proposing solutions and understanding product development cycles at a global scale through real-world case studies

#### Amazon

Seattle, WA

Cohort Member

June 2025 - August 2025

- Completed Amazon's 10-week Campus Prep Series, developing skills in networking, resume optimization, and interview preparation through 10+ specialized sessions focused on technical career advancement
- Enhanced technical interview and cloud computing skills through Amazon's SDE Interview Prep and AWS sessions, improving problem-solving capabilities and gaining hands-on experience with EC2, S3 and Lambda

# Jane Street

New York City, NY

Software Engineering Fellow

- May 2025 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
- Boosted functional programming skills in OCaml through 10+ hours of technical workshops, collaboratively building a trading simulation that processed 900+ concurrent operations using threads, processes, and virtual memory management optimization

### **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%
- Developed 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 on AWS using multithreaded development
- Implemented predictive algorithms improving weather preparedness accuracy by 40% and solving unpredictability challenges for 30,000+ Ithaca residents

#### LEADERSHIP ROLES

National Society for Black Engineers(NSBE) - Peer Mentor Underrepresented Minorities in Comp.(URMC) - Freshman Rep

ColorStack - Member