# Sylvester Elorm Kpei

607-339-9886 | sek266@cornell.edu | linkedin.com/in/ks200 | github.com/kpeis695 | kpeis695.github.io

## Education

**Cornell University** **Ithaca, NY**

*Bachelor of Science in Computer Science* *Expected May 2028*

**Relevant Coursework:** Data Structures & Algorithms, Object-Oriented Programming, Calculus I–III, Functional Programming

## Technical Skills

**Languages**: Python, Java, HTML/CSS, C++, JavaScript, Go, OCaml, Swift, PostgreSQL, Ruby, Perl, GraphQL

**Tools & Frameworks**: MongoDB, React, Node.js, FastAPI, AWS(EC2), Express.js, RESTful APIs, Docker, PyTorch, Bootstrap, Matplotlib, Linux(Ubuntu), Pandas, NumPy, Material-UI, VS Code, GitHub

## Experience

**NeuralSeek** | AI Engineering Intern | Miami, FL *August – September 2025*

- Built production agentic AI agents for customer service automation using NeuralSeek's multi-LLM platform, implementing 5+ enterprise agents that automated 80% of inquiries and reduced response times from 2 hrs to 5 mins
- Configured knowledge bases with company documentation and support data through no-code implementation, achieving 90%+ AI response accuracy while enabling 24/7 automated support across multiple departments

**African Languages Lab** | Software & Data Engineering Intern | Madison, WI *May – August 2025*

- Built AI translation models using TensorFlow and Pandas that outperformed Google Translate (61 vs 55 BLEU score), processing 300+ endangered dialects and creating PyArrow audio extraction tools for 18M speakers worldwide
- Developed automated data collection systems using Python and BeautifulSoup, reducing manual work by 80% and accelerating training of translation models that serve underrepresented communities globally

## Professional Development

**Jane Street** | Software Engineering Fellow | New York City, NY *May 2025*

- Built a high-performance trading simulation using OCaml and multithreading concepts in the Jane Street FOCUS program, successfully processing 900+ concurrent operations with optimal performance
- Collaborated with 51 elite students selected from 6,000+ national applicants in functional programming workshops, gaining advanced experience in quantitative finance and algorithmic trading

**NVIDIA** | Software Engineering Fellow | Remote *June – August 2025*

- Implemented CUDA optimization techniques across 3+ robotics and deep learning pipelines in the NVIDIA Summer Bridge Program, using GPU architecture principles to reduce memory usage by 30%
- Collaborated with 10 senior engineers and worked alongside a cohort of 50 students to enhance computational workflows and gain hands-on experience with high-performance computing

**Google** | Software Engineering Track Lead | Remote *July – August 2025*

- Promoted to Software Engineering Track Lead in the Mentor Me Collective x Grow with Google program, mentoring 25+ software engineering scholars through weekly mentorship sessions and technical career development workshops

**Microsoft** | Emerging Leader | Remote *July – September 2025*

- Enhanced technical project leadership and agile methodologies through Microsoft Security's program, developing stakeholder communication and decision-making frameworks across 7 weekly modules with 100+ participants

**Amazon** | Cohort Member | Remote *June – July 2025*

- Attended Amazon University Event-Campus Prep Series, completing 12 intensive sessions covering tech interview prep, AWS cloud computing (EC2,S3,Lambda), and strategic networking while mastering Amazon's leadership principles

## Projects

**RoadBuddy** | youtu.be/1-CiGIoMZG8 — *SwiftUI, Flask, Material-UI, REST APIs*

- Built intercity carpooling platform using Swift/SwiftUI and Python Flask with 40+ REST endpoints at 95% uptime after identifying transportation gaps among Cornell students seeking shared rides to airports and destinations
- Integrated Stripe payments, real-time GPS tracking, 5-star ratings, and messaging features across 8 mobile screens, reducing travel costs by 60% and streamlining campus mobility solutions

**SilverStore** | kpeis695.github.io/SilverStore — *React, Node.js, PyTorch, PostgreSQL, Numpy, HTML/CSS*

- Developed secure e-commerce platform with integrated payment processing and automated inventory management, successfully handling 30+ orders with streamlined operations
- Built AI recommendation system using collaborative filtering that achieved 94% accuracy, reducing manual oversight by 80% and increasing user engagement by 76%

**Weather Dashboard** | ithaca-weather-dashboard.onrender.com — *Dash, Plotly, Matplotlib, AWS(EC2), JavaScript*

- Built interactive weather analytics platform using Python, Dash, and Plotly with multithreaded data processing from 4 locations in Ithaca and AWS cloud deployment for scalable performance
- Applied statistical analysis to predict rainfall patterns, improving weather preparedness accuracy by 40% and helping 30,000+ Ithaca residents make better daily planning decisions