Sylvester Elorm Kpei

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

EDUCATION

Cornell University

Bachelor of Science in Computer Science

Ithaca, NY

Expected May 2027

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

TECHNICAL SKILLS

Languages: Python, Java, Go, C++, JavaScript, OCaml, Swift, SQL(PostgreSQL), HTML/CSS, 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 (CerebralBlue Inc.) | AI Engineering Intern | Miami, FL

August - September 2025

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 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
- Facilitated peer collaboration initiatives and provided industry insights with 90%+ engagement rates while completing advanced leadership training curriculum

Microsoft | Emerging Leader | Remote

• 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

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%

 $\textbf{Weather Dashboard} \mid \textbf{ithaca-weather-dashboard.onrender.com} - \textit{Dash}, \textit{Plotly}, \textit{Matplotlib}, \textit{AWS}(\textit{EC2}), \textit{JavaScript} \mid \textbf{AWS}(\textit{EC2}), \textit{AWS}(\textit{EC2}), \textit{AWS}($

- 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

Leadership Roles

NSBE(Peer Mentor) - Guided 47 incoming students on navigating coursework and internship prep **URMC**(Freshman Rep) - Represented 20+ freshman cohort, organized events to support underrepresented peers in CS