

Nicholas K. George

(340) 626-7932 | nkg37@cornell.edu | [linkedin.com/in/nicholas-kofi-george](https://www.linkedin.com/in/nicholas-kofi-george) | nicholaskgeorge.info

EDUCATION

Cornell University

Master of Science in Electrical and Computer Engineering

May 2025

Cornell University

B.S Electrical and Computer Engineering

May 2023

RELEVANT COURSES

Computer Architecture*, Deep Learning*, Digital Signal Processing*, FPGA Design, Embedded Systems

*during masters

RELEVANT EXPERIENCE

Masters Project: Hardware Accelerated Speaker Diarization

Ithaca, New York

Project Designer

September 2023 - Present

- Train and implement hardware accelerated machine learning model to identify unique speakers on FPGA.
- Design hardware accelerator on FPGA for neural net and clustering algorithm for real-time deployment.
- Independently construct dataset tailored for speaker embeddings training using publicly available data.

Cornell Auto Drone Project Team

Ithaca, New York

President and Electrical Sub-team Lead

November 2019 - May 2024

- Founded Cornell project team to design autonomous drone capable mid-flight object manipulation.
- Collaborated with students of different technical backgrounds to develop the project and team.
- Designed software to control drone flight controllers through serial communication with a Jetson Orin.

Viasat Intern

Phoenix, Arizona

Digital Hardware Engineer

May 2023 - August 2023

- Optimized hardware to speed up bitstream upload to flight hardware by an order of magnitude.
- Edited and refactored existing hardware design in Verilog to implement new customer requirements.
- Tested hardware and researched different solutions to issues for tasks independent of the rest of the team.

Alpha Cube Satellite Lab Member

Ithaca, New York

Undergraduate Lab Member

January 2023 - May 2023

- Developed embedded system for lab developing cube satellite with a solar sail and chip satellite payload.
- Programmed on board microcontroller to detect payload deployment and track accelerometer data.
- Designed procedures for packaging and downlinking of critical mission data sent back to earth.

ADDITIONAL EXPERIENCE

Projects

September 2019 - Present

- Independently design recreation of a functional Apple 2+ personal computer in hardware using FPGA.
- Collaborated in a team of three to implement 2D hardware accelerated planetary simulation on FPGA.
- Used facial recognition model on a Raspberry Pi to play personal theme songs when entering a room.

Autonomous Sailboat Researcher

May 2021 - May 2023

- Independently programmed Embedded System for an autonomously navigating solar powered sailboat.
- Personally designed and constructed power distribution board and solar charging circuitry for the boat.
- Designed RTOS controller for GPS navigation systems, actuators, sensors, radio, and satellite signals.

SKILLS

Verilog, Machine Learning, Embedded Systems, Digital Circuits, Python, C, Agile Development