

HOANG NGUYEN

404-988-6045 | hnguy148@students.kennesaw.edu | linkedin.com/in/hoang-n-457375262 |
github.com/hoangcpe | US Citizen | English and Vietnamese
Website: hoangcpe.org

EDUCATION

Kennesaw State University - Honors Student

Bachelor of Science in Computer Engineering - Minor in Mathematics (4.0 GPA)

Marietta, GA

Expected graduation: Dec 2027

OBJECTIVE

Junior computer engineering student with a strong aptitude for math, physics, and electronics. Seeking an internship to apply theoretical knowledge and a passion for computer systems to solve real-world problems..

PROJECTS

- **Raspberry Pi Hardware Control & Interfacing:** Engineered a real-time environmental monitoring system on a Raspberry Pi Zero using Python and the Sense HAT library. Interfaced directly with hardware sensors to process and display live temperature, humidity, and pressure data, gaining practical experience in hardware I/O and understanding CPU memory access for real-time display updates.
- **Digital Logic Design & Simulation:** Designed and validated a complex, multi-state traffic light control system incorporating timer-based logic for vehicle flow, pedestrian crossings, and train detection. Utilized the Hneemann Digital Logic Simulator to create schematics, perform functional simulations, and verify the correctness of the custom logic circuits.
- **Low-Level & Embedded Programming:** Developed custom graphing and equation-solving applications for the TI-84+ CE calculator using TI Basic and eZ80 Assembly. Got familiar with low-level programming techniques by optimizing code for performance and efficient memory usage on resource-constrained embedded hardware.
- **Networking & Server Administration:** Deployed a multi-service home network environment on a Mac Mini using Docker for containerization. Administered services to enhance network security and functionality, including a Pi-hole DNS sinkhole, a custom PiFi wireless router, and a private eBook server.

TECHNICAL SKILLS

Languages: C/C++, Python, TI Basic, x86 Assembly, Verilog, VHDL, R, latex.

Software: AutoCAD, Revit, LTSPICE, MATLAB, MS Office, Linux, Git, VS Code, Visual Studio, Adobe Creative Suite.

Hardware: Digital Multimeter, Oscilloscope, Function Generator.

Miscellaneous: Digital Logic, Circuit Analysis, Soldering, Wiring.

Soft-skills: Problem-solving, Critical Thinking, Adaptability, Time management, Teamwork.

EXPERIENCE

Low Voltage Designer Co-op

08/2025 - Present

Jordan & Skala Engineers

Norcross, GA

- Collaborating with the Low Voltage team to learn electrical design concepts, data telecommunication, legal codes, and enhance AutoCAD and Revit skills.
- Working closely with a mentor, gaining hands-on experience through observation, instruction, and site visits for different types of buildings, such as hotels, restaurants, multi-family, and apartments.
- Reviewing shop drawing submittals, and performing calculations.

SI leader - Student Assistant

05/2025 - Present

Kennesaw State University

Kennesaw, GA

- Facilitating peer-led study sessions for Calculus and Physics. Improved academic outcomes for over 200 students in challenging Calculus and Physics courses, resulting in a reported 30% average increase in final exam scores for session attendees, by facilitating two peer-led study sessions per week.
- Mentoring students to promote independent learning and critical thinking skills, fostering a supportive
- Collaborating with faculty to align study sessions with course objectives, ensuring relevance and effectiveness.