Ebere Ezeobi

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EDUCATION

Kennesaw State University | Marietta, GA. Expected Graduation December 2025

B.S.E.E- **Electrical Engineering** *Cumulative GPA:3.52/4.00*

*Minor in **Mathematics***

Coursework**:** E-Mag, Embedded sys, Calculus, ODE, PDE, Digital Systems, Semiconductors, Electronics, Control systems, E-Machines, Signals, Programming ({front end},C++, C, JS, ARM Assembly), Circuit Analysis, Project Management.

PROJECTS

- **Yagi-Uda Antenna (Design, Simulation & Build)** – Designed and simulated a high-gain directional antenna using CST Studio for a 915 MHz frequency. Tested the antenna for signal-tracking applications in a "Fox Hunt" competition. Developed skills in RF design, 3D E-Mag simulation, and practical hardware construction. *Link to project – https://ebere-code.github.io/portfolio/Project/yagi-uda-antenna-project.html*
- **Real-Time Clock and Temperature Display (Embedded Systems Project)** – Designed and implemented a real-time digital clock and temperature monitor using an STM32 microcontroller, a 4x4 keypad, temperature sensor, and an LCD display. Enabled time setting via keypad input and unit toggling (°C/°F) via pushbutton. Integrated timer interrupts, ADC readings, and a custom LCD driver in C and assembly. Link – *https://ebere-code.github.io/portfolio/Project/time-temp-project.html*
- **RESEARCH: Power Distribution System Optimization**- Using LTspice and MATLAB, I Modeled and optimized the power distribution system for an industrial facility. Analyzed factors like power consumption, voltage drops, and system efficiency under varying conditions. Proposed improvements to balance loads and minimize energy losses. I achieved a 10% improvement in system efficiency by optimizing power distribution, reducing voltage drops, and ensuring a balanced load.
- **Smart Thermostat Control System (Simulation Project)** - Designed and simulated a smart thermostat control system using PID controllers in MATLAB and Simulink. Analyzed system stability and performance through impulse, step, and Root Locus plots *Link- https://ebere-code.github.io/portfolio/Project/controls-project.html*
- **Digital Logic counter** – Built a digital counter using TTL ICs and a double seven segments display.
- **Personal Portfolio** – Using HTML, CSS, and light *JavaScript*, I created a professional portfolio to keep track of my projects. *Link to portfolio- https://ebere-code.github.io/portfolio/*
- **Arduino Jump man Game –** Codded and built a simple game of jump man using the Arduino uno microcontroller. *Link- https://ebere-code.github.io/portfolio/Project/arduino-jumpman-game.html*

WORK EXPERIENCE

Electrical Engineering Intern | Burns & McDonnell OGC Practice | Houston, TX

May 2025 – August 2025

- Supported engineering projects through standard design tasks, documentation, and data analysis for OGC systems.
- Assisted lead engineers with technical research, project coordination, and continuous improvement efforts.
- Utilized Microsoft Office tools to create reports, presentations, and maintain project documentation.

Lab Assistant | Kennesaw State University | Marietta, GA

January 2024 – May 2024

- Worked alongside Engineering Professors to create an execute lesson plans.
- Improved freshman Intro Lab scores by 20% through group tutoring as well as supplementary tutoring.
- Received an average score of 9/10 on the anonymous tutor reviews given to students at the end of each semester.

Certified Nurse Aide (CNA) | Brickmont Assisted Living/ Sterling Estate of West Cobb | Marietta, GA

February 2022 – May 2025

- Provide direct patient care, including assisting with daily living activities.
- Monitor and record vital signs, report changes in patient conditions, and communicate effectively with nursing staff.
- Maintain a clean and safe environment, adhering to health and safety regulations.

SKILLS

- Microsoft Office Suite
- Adaptability - Communication
- Complex Problem Solving
- Time Management

TECHNICAL SKILLS

- Firmware Development/Microcontrollers (Arduino, NUCLEO-STM32, Raspberry pi)
- Signal processing and Systems controls
- Proficiency with Engineering Lab Equipment
-MATLAB/Simulink
-LTspice(schematic and circuit Simulation)
-Digital Logic Design