Elijah Parker

⚲ Laurel, MD ✉ elijahparker000@gmail.com ☎ (256) 996-5241 ⚲ elijahparker000.com **in** elijahparker000
⚲ elijahparker000

Projects

Distributed Agricultural Monitoring Network (DNAM)   *July 2023 – May 2024*

- Auburn University's first international collaboration for a senior design project
- Worked with electrical engineering students from THWS in Geramny to design a LoRaWAN based agricultural monitoring system
- Managed project budgets, Bill of Materials, travel, weekly meetings, status reports, Gantt charts, and presentations
- Developed Arduino code, installed gateway on campus, deployed Django website, demonstrated successful project to faculty and students

3D-Printed Prosthetic Chicken Legs(probably no link but I could? ↗)   *2022 - Present*

- Designed custom 3D printable prosthetic legs for rescued chickens at animal sanctuaries in Toronto, Florida, and Michigan
- I worked with people on a cool project and I'm da bomb but idk how to put that on my resume

JeopardyPi: Raspberry Pi Trivia System   *NOT Ongoing*

- Developed fully functional, Python-based Jeopardy game to run on Raspberry Pi including PCB design for buzzers and support for a game host

Church Website   *NOT Ongoing*

- Developed a website for my church for better coordination (idek what to write. Should this even go here???)

Experience

Wireless Communications Engineer (Active TS Clearance)   *Laurel, MD*
Johns Hopkins University Applied Physics Laboratory   *June 2024 – Present*

- Research and development in advanced wireless communications systems

Undergraduate AI Researcher   *Auburn, AL*
Open-Ended Reasoning and Knowledge Acquisition Lab   *October 2023 – April 2024*

- Implemented MFCC techniques for speech recognition on EPIC-KITCHENS-100 dataset to improve multimodal video understanding

Student Employee   *Auburn, AL*
Alabama Micro/Nano Fabrication Lab   *Feb 2023 – May 2024*

- Assisted PhD students with chemical processes for microelectronics fabrication
- Designed and manufactured custom aluminum parts using Fusion 360 and Haas CNC
- Maintained Python code to automate chemical inventory tracking
- Cleaned, organized, and maintained cleanrooms, chemical labs, and specialized equipment

Student Employee   *Auburn, AL*
Auburn University ECE Department   *Oct 2019 – May 2024*

- Supported students and faculty with senior design projects
- Organized, cleaned, and maintained electronics and equipment

Process Engineering Co-Op   *Auburn, AL*
SiO2 Medical Products   *Spring 2022 & Fall 2022*

- Operated, validated, and debugged manufacturing machinery
- Collaborated with cross-functional teams to ensure quality and documentation

Computer Engineering Co-Op *Huntsville, AL*
Technology Service Corporation *Jan – May 2021*

- Developed Python scripts to streamline product testing
- Tested and validated system performance

Honors Calculus II Tutor *Auburn, AL*
Auburn University *Jan – May 2020*

- Tutored students individually to help further their understanding of topics covered in Honors Calculus II

Education

Johns Hopkins University *August 2024 – Present*
MS in Electrical and Computer Engineering

- GPA: 4.0/4.0
- **Coursework:** Algorithms, Digital Signal Processing, LaTeX

Auburn University *August 2019 – May 2024*
BS in Electrical Engineering (Summa Cum Laude)
BS in Computer Engineering (Summa Cum Laude)

- GPA: 4.0/4.0
- **Coursework:** Computer Architecture, Electromagnetism, Algorithms, Random Signals and Systems, Digital Electronics, Analog Electronics, Control Systems, Electrical Power Engineering, Discrete Structures

Skills

Languages: Python, C, C++, Java, Verilog, Matlab
Tools: Git/GitHub, LTspice, Fusion 360, Haas CNC
Hardware: Arduino, Raspberry Pi, PCB design, 3D printing **I should probably say something project management-y here**

Activities & Awards

- This whole section should probably just be scrapped?
- Song Director at Mt. Vernon Baptist Church
- **Awards:**

  - Auburn University Computer Engineering Student of the Year
  - Auburn University 2023-2024 Electrical and Computer Engineering Academic Achievement Award
  - ECE Capstone Showcase Outstanding Project Award (DNAM)