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EDUCATION

Georgia Institute of Technology, Atlanta, GA Undergraduate - Bachelor of Science in Electrical Engineering, Minor in Robotics, GPA 3.61/4.0 Graduate - Master of Science in Electrical and Computer Engineering, GPA 3.71/4.0

August 2019 – December 2023 (Graduated December 2022) (Graduated December 2023)

April 2024 – Present

May 2023 – December 2023

SKILLS Tools: Altium, Eagle, Arduino, COMSOL, Quartus, Mbed, Cadence, Git **Programming:** C/C++, Java, Python, MATLAB, VHDL, Assembly, SCPI Embedded systems/software, circuit design/analysis, PCB design/routing, RF design, CAD software, power **Concepts:** systems, communication protocols, radar systems, ADC design, digital system design, MEMS design, microcontrollers, 3D printing

Athletics: Rock climbing, archery, basketball, soccer

EXPERIENCE

Boeing, Everett, WA

Cabin Systems Design Engineer

- Lead the cabin systems electrical design of 6 new 787 model airplane configurations that requires coordination between over 10 teams, suppliers, and customers
- Created over 50 functional schematics and wiring diagrams for electrical systems that account for circuit protection, signal integrity, electromagnetic interference, power quality, and voltage drop
- Direct the integration, testing, and certification of Bluetooth for all 787 model airplanes while creating requirements to mitigate cybersecurity risks
- Manage the development and wrote new build test procedures for 6 new supplier 5G cellular modems and video control stations
- Drove improvements to new 10G backbone wiring by adding feedback protections for discrete signals
- Troubleshot 9 production airplanes for issues with database software and hardware

Atlanta Micro, Peachtree Corners, GA

RF Engineering Intern

- Conducted a package/bond-wire study to determine the optimal packaging configuration by collecting through die and package s-parameter data and creating lossy package/bond-wire models based on the difference in their s-parameters
- Created 4 new module boards with coplanar waveguide and microstrip transmission lines, each with a ferrite and conical inductor designs for their bias tees
- Created a highly customizable GUI using Python and SCPI communication that allows engineers to automatically test and collect data on a new tester that will save hundreds of hours in manual testing time
- Designed custom RF probe boards for 3-port devices allowing for every termination scheme for 2 probe setups Texas Instruments, Dallas, TX May 2022 - August 2022

Product Engineering Intern

- Created a script to automate the creation of a test program that increased the efficiency of testing across the company
- Completed 12 customer sample requests which included retrieving inventory of specific units, programming and testing the units, and handling shipment to customers
- Successfully debugged a thermal shutdown failure on an in-development chip that kept the development schedule on track
- Successfully tested and debugged 20+ printed circuit boards used for stress testing new products

Siemens - Russelectric, Hingham, MA

Engineering Development Program Intern

- Designed subsystem prototypes for a lower cost automatic transfer switch (ATS) controller
- Tested/debugged ATS prototypes and updated schematics to improve performance stability
- Reverse-engineered currently outsourced ATS controller to generate a price estimate and create documentation
- Developed an automated bill of materials and risk analysis template for electrical components with other interns
- Learned Russelectric Microgrid product and gave sales presentations to potential customers

CLUBS AND LEADERSHIP

Georgia Institute of Technology: RoboJackets

RoboRacing Electrical Lead

RoboRacing is a high-speed autonomous car competition team

- Directed decisions on the electric system of two vehicles
- Managed 15+ electrical team members, organized 5 projects, and handled parts purchasing for those projects
- Designed, routed, and programmed 2 embedded PCBs that controlled drive and brake functions of the vehicle
- Led design reviews for electrical team projects
- Promoted cross-functional team participation to achieve goals through weekly meetings between sub-team leads Electrical Training Lead
 - Coordinated the creation of a 6-week training curriculum for new electrical team members
 - Created 3 lessons of lectures and labs on using PCB design software, electrical basics, and prototyping
 - Ran a training program for 50+ new members

The Hive at Georgia Tech Peer Instructor

Received training and assist end-users with PCB fabrication tools (LPKF ProtoMat, LPKF ProtoLaser, LPKF Contac S4), laser cutting, 3d-printing, benchtop equipment, and soldering

RESEARCH AND PROJECTS

VGlass - Senior Design Project

- August 2022 December 2022 Created a wearable headset that aids the visually impaired with reading text and obstacle avoidance
- Conducted market research and customer discovery to determine the desired functionality of the product
- Managed the team using a detailed project plan and Gantt chart
- Designed the hardware system with a custom PCB, Raspberry Pi, camera, speaker, haptic motors, and time of flight sensors **Junior Design Project** January 2022 – May 2022
 - Created an animatronic character with multiple movement modes, a complex control system, and text-to-speech capability
 - Designed the control system with a custom PCB, servos, switches, speakers, and a power system with server communication capability

January 2020 – December 2023

April 2020 – April 2021

Mau 2021 – August 2021

April 2021 – April 2022