

MATTHEW WOODWARD

220 Bobby Dodd Way NW Atlanta, GA 30332 | (404) 385-5555 | matthew.woodward@gatech.edu | US Citizen

OBJECTIVE

I am a second-year electrical engineering student pursuing a fall undergraduate research position in a lab studying energy advancements. I will bring a dedicated, self-starter work ethic to the position. I am interested in working to find sustainable or more efficient energy solutions in a role where I am able to apply my investigative nature and analytical mindset.

EDUCATION

Georgia Institute of Technology | Atlanta, GA

Bachelor of Science in Electrical Engineering

Minor: Stephen A. Denning T&M Program Engineering & Business

August 2020 - Present

Graduating December 2023

GPA: 4.00/4.00

SKILLS

Programming: Python (advanced), R (intermediate), MATLAB (intermediate), JavaScript (advanced), Node.js (advanced)

Software: AutoCAD (beginner), Revit (beginner), NI-ELVISmx (intermediate), LabVIEW (intermediate)

Hardware: Oscilloscope (intermediate), PCB Design (beginner), LiDAR (beginner), MyDAQ (intermediate)

Languages: English (native), Mandarin Chinese (beginner)

RELEVANT COURSEWORK

Digital Logic Circuit Design: MOSFETs, logic gates, Boolean algebra, Karnaugh maps, multiplexers, demultiplexers, encoders, decoders, building and analyzing digital logic circuits

Physics of Electricity and Magnetism: Fundamental properties of how electricity and magnetism are interconnected; electromagnetic induction; current, resistance, power, Gauss's Law; Biot-Savart Law; Ampère's Law

EXPERIENCE

Georgia Tech Office of Information Technology | Atlanta, GA

January 2021 - Present

Agile Team Lead, Product Manager Intern

- Manage the team's agile board with 30+ stories to plan biweekly sprints and effectively allocate resources to tasks at hand
- Consult the progress of 9+ student projects daily to ensure development queue moves smoothly and members are up-to-date
- Serve as the ambassador, conducting orientation and training for 2+ students monthly to ensure smooth integration into team

Bifilar Induction Heater | Johns Creek, GA

January 2021 - Present

Personal Project

- Investigate induction and electromagnetism for 15+ hours to prepare a design for a bifilar pancake coil induction heater
- Undertake an iterative ideation process with 2+ designs to agilely detect faults in project designs and focus on improvement
- Perform hands-on project involvement with advanced electrical engineering concepts like zero voltage switching circuits

Portfolio Website | Johns Creek, GA

December 2019 – June 2020

Personal Project, (<https://matthew-woodward.netlify.app/>)

- Conducted 10+ hours of independent research to identify modern web design best practices and build a thorough roadmap
- Applied advanced techniques within HTML and CSS to maximize webpage responsiveness between different screen sizes
- Achieved a 99+ score in speed according to Google's PageSpeed Insights by focusing on optimal techniques in production

LEADERSHIP

Alpha Kappa Psi, Co-Ed Professional Fraternity | Atlanta, GA

January 2021 - Present

Incoming Vice President of Professional Programming, Director of Internal Professional Programming

- Cultivate 2 business workshops for 16 members in training to inform about, give feedback on, and bolster business acumen
- Head a 6-week track on Psychology of Success for 20+ Brothers on overlooked aspects of personal and professional success
- Operate as a professional resource for 60+ Brothers to ensure quality of Brother resumes and interview and presentation skills

Georgia Institute of Technology | Atlanta, GA

August 2020 – December 2020

Automotive LiDAR Vertically Integrated Projects

- Boosted concentration of autonomous vehicle's LiDAR pointcloud 400% for more accurate navigation of environment
- Prepared detailed and thoughtful documentation for 2 major code repositories to assist in onboarding future new members
- Delivered insightful presentations 2 times weekly to project teams that thoroughly outlined progress, obstacles, and goals