Benjamin R. Morrissey

520 Bexley Bluff Lane Cary, NC 27513 | (919) 999-0324 | bmorrissey9@gatech.edu | US Citizen

Objective

Freshman at Georgia Institute of Technology with a foundation in Python, C++, physics, and software development. Majoring in Electrical Engineering and experienced with embedded systems and interdisciplinary projects. Looking to develop my skills through experiences related to software and hardware.

Education

Georgia Institute of Technology | Atlanta, GA   *August 2025 – Present*
Bachelor of Science in Electrical Engineering, GPA 4.00   Expected Graduation, May 2029

Skills

Programming and Software: Python (advanced), C++ (intermediate), MATLAB (basic), Java (basic), Git CLI, VS Code, GitHub
Hardware and Systems: Raspberry Pi, microcontrollers (ESP 32, Raspberry Pi Pico), embedded systems, Linux (Debian)
Communication: Data Visualizations, Lab Reports, Pitch Decks
Languages: Spanish (conversational), English (native)
Conceptual Knowledge: Calculus, Physics, Chemistry, Economics

Experience

Vector Textiles | Cary, NC   *June 2024 – June 2025*
Paid Intern
- Managed the company website, integrating data visualization to promote chemical-free mosquito-resistant
- Researched target markets for products in preparation for launch

Schoolhouse | Remote   *January 2024 – February 2025*
Volunteer Tutor
- Developed structured lesson plans for calculus and SAT – explained complex mathematical concepts
- Received 100% positive feedback in 90+ student reviews, emphasizing accuracy and interactive teaching style

Projects

Dotify | Hackathon Project, HackGT   *Fall 2025*
Software Lead
Awarded 2nd place in the hardware category at HackGT among 914 participants for Dotify - an AI-Powered braille label printer (converted images to concise labels for use in retail stores).
- Led frontend (Typescript) and backend (Python, Gemini API integration) for the webpage, which was where the images were taken. Also collaborated on firmware development (C++) for servo control

Omni-Directional Robot | Personal Project   *Summer 2025*
Embedded Systems Developer
Persona project--just before entering college--to learn microcontroller programming and embedded systems problem-solving skills.
- Constructed and programmed robot using dual DC motors with PWM speed and directional control
- Empirically determined relationship between duty cycle and angular speed and implemented calibration in MicroPython
- Iterated the project repeatedly to reach desired motion – from a vector-based algorithm to a rotate-then-move approach

Relevant Coursework

Intro Signal Processing: Currently enrolled; exploring signal analysis using sinusoids and Fourier transforms with a focus on MATLAB applications for real-world data.
Digital Systems Design: Currently enrolled; Studying digital logic, CMOS design styles (Domino and dynamic logic), and high-performance system automation.

Leadership

SoccerMoves | Leader of Coaches   *March 2023 – June 2025*
- Provided access to weekly soccer sessions for kids in underserved communities
- Facilitated coaching and scheduling; partnered with 3 local schools/organizations and oversaw 40-50 participants per week