Liam Boyle

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EDUCATION

B.S. in Electrical Engineering (GPA: 3.7), *Virginia Tech* – Blacksburg, VA   Graduating 05/2025

- Major: Micro/Nanosystems
- Minor: Computer Science
- Relevant Coursework:
    - Analog Electronics
    - Semiconductor Device Fundamentals
    - Data Structures and Algorithms
    - Signals and Systems

EXPERIENCE

Electrical Engineering Intern, *WSP USA* – New York, NY   05/2023 – 08/2023; 12/2023 – 01/2024

- Coordinated with architects and engineers of multiple disciplines to provide solutions to building systems for the Port Authority Bus Terminal, Tiffany & Co., and other clients.
- Developed power, lighting, and fire alarm plans using Revit and AutoCAD and performed load calculations to provide power to different electrical systems while adhering to the NYC and National Electric Code.
- Carried out worksite inspections and coordinated with contractors during construction to resolve conflicts and ensure steady progress.
- Presented work to the office at the end of the internship and outlined key project achievements and outcomes.

Avionics Member, *Orbital Launch Vehicle Team* – Blacksburg, VA   09/2022 – 12/2023

- Collected and analyzed telemetry data to configure multiple flight computers that successfully fired in a 3000 ft launch.
- Collaborated with other subteams to resolve conflicting designs and facilitate the union of our subsystems.
- Gained soldering and hands-on experience from working with and troubleshooting different components and systems in the rocket's electronics bay.

Maintenance and Groundskeeping Lead, *Four Green Fields* – Accord, NY   05/2020 – 08/2023

- Tended 175 acres of land weekly at a private resort, trained new employees, and created schedules and work itineraries for myself and other employees.

TECHNICAL SKILLS

Software: Revit, AutoCAD, Verilog, C, C++, MATLAB, LTspice, Java, JavaScript, React, HTML, Bluebeam, Microsoft Office

Hardware: Circuit design, reading multimeters and oscilloscopes, embedded systems (MSP432 LaunchPad), FPGAs, PCB design

PROJECT EXPERIENCE (Portfolio: liamboyle4.github.io)

Home Audio System, *Virginia Tech*   08/2023 – 12/2023

- Built and integrated a three-band graphic equalizer, class D amplifier, and spectrogram using only basic electrical components, an Arduino, and Fourier transforms.
- Achieved 87% power efficiency and an undistorted output from the class D amplifier.

Delivery Robot, *Virginia Tech*   01/2022 – 05/2022

- Designed and built a prototype of a food delivery robot containing remote controlled motors, an insulated food cabin, and a lightweight 7-pound chassis.
- Developed a movement system using an Arduino and four motors and incorporated an HC-06 Bluetooth module to allow for wireless control.

AWARDS AND HONORS

All semesters	**Dean's List,** *Virginia Tech*
10/2023 – Present	**IEEE-HKN Honor Society Member,** Virginia Tech
06/2022	**NYPD Sergeants Benevolent Association Scholarship**