

# ANDREW NOONAN

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## EDUCATION

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### Vanderbilt University

*Bachelor of Engineering in Mechanical Engineering*  
*Minor in Computer Science* | GPA: 3.83/4.0 | Cum Laude

Nashville, TN

May 2023

### Vanderbilt University

*Master of Science in Mechanical Engineering*  
GPA: 4.0/4.0

Nashville, TN

Expected May 2025

## WORK EXPERIENCE

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### Vanderbilt Aerospace Design Laboratory (VADL)

*Graduate and Undergraduate Research Assistant*

Nashville, TN

May 2022 - Present

- Designed, fabricated, and characterized performance of Venturi air injectors for viscous fluids
- Modified VW Diesel engine test facility to measure lubricant flow rate and main gallery pressure
- Studied applicability of Fiber Bragg Gratings to structural health monitoring of composite airframes
- Designed, tested, and flight-validated RF payload detachment system for NASA USLI challenge

### Vanderbilt University School of Engineering

*Teaching Assistant - Energetics Lab, FEA, Fluid Mechanics, Machining Lab*

Nashville, TN

August 2022 - December 2024

- Energetics Lab - Guided students through hands-on studies of Fluid Mechanics, Heat Transfer, and Thermodynamics with SI engine, wind tunnel, water tunnel, and heat exchanger labs
- FEA - CNC Machined and tested students' final projects, lectured, and guided students through assignments

### SitelogIQ

*Solutions Development Intern*

Nashville, TN

May 2021 - August 2021

- Created customer-facing technical documents and project reports
- Wrote Python and Power Automate scripts to automate tasks and facilitate communication between teams

## LEADERSHIP AND SERVICE EXPERIENCE

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### NASA University Student Launch Initiative (USLI)

*President / Project Manager, Graduate Mentor, Outreach Lead*

Nashville, TN

August 2022 - Present

- Served as president of 11-person team to research, design, and launch a rocket with a novel robotic payload for NASA Student Launch Competition (3rd place overall in national competition)
- Graduate mentor to 2024 and 2025 teams, outreach lead for 2024 team
- Led hands-on STEM educational activities to 1400+ K-12 students and community members

### AIAA Reusable Launch and Space Vehicle Technical Committee

*Awards Subcommittee*

Nashville, TN

December 2024 - Present

- Working with academia and industry professionals to develop a student competition for the AIAA RLSV technical committee

## AWARDS AND HONORS

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- **Leadership Awards:** Vanderbilt Mechanical Engineering Department Leadership Award and Connecticut Associate of Boards of Education for undergraduate and high school leadership respectively
- **Best Paper Award:** Second author, recipient of best paper award at AIAA Student Conference Region II

## SKILLS AND INTERESTS

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- **Skills & Programming:** CAD/CAM, CNC, MATLAB/Simulink, LabVIEW, C++, Ansys, Comsol
- **Interests:** Travel, live music, cooking, basketball, golf, stand-up comedy, running