

# Thomas Zaffiro

[tzaffiro3@gatech.edu](mailto:tzaffiro3@gatech.edu) | (216) 333 - 8598

85 Meadowhill Lane, Moreland Hills Ohio, 44022

## EDUCATION

**Georgia Institute of Technology** - North Ave NW, Atlanta, GA 30332 Graduation December 2023

- Major: Aerospace Engineering
- Aerospace Engineering Honors BS/MS Program Graduation December 2024
- GT Honors Living Learning Community
- GPA: 3.92

## SKILLS and COURSEWORK

**MATLAB; SOLIDWORKS and GD&T; Rigid Body Statics; Technical Writing and Communications; Machining; Right To Know; Laser Safety; Lab Safety; Aerodynamics; Structural Analysis; Machine Learning**

## WORK EXPERIENCE

**Georgia Tech Research Institute - Research Engineering Intern** (2022-Current)

- Electro-Optical Systems Lab
- Utilizing a high throughput, combinatorial approach to synthesize arrays of ceramic compounds
- Using a thin film ion deposition chamber in tandem with various masks
- Designing, creating and testing an automatic probing device for ceramic compounds

**Ben T. Zinn Combustion Laboratory - Lasers and Fluids Group** (2022-Current)

- Planning and building a large scale, high pressure combustion rig
- Fabricating parts in the machine shop
- 3D modeling the rig in SolidWorks

**ASDL Research - GT SMART Campus** (2021)

- Designed and fabricated a pitot tube used to measure airflow in buildings
- Researched and programmed Raspberry Pis and accompanying hardware
- Evaluated data to improve energy and spatial efficiency

**Kinzie Advanced Polymers - Product Development** (2021)

- Developed new tote liners
- Assisted in the creation of climate control packaging
- Spearheaded the fabrication of liner prototypes

**ME 1770 Engineering Graphics - SOLIDWORKS Final Project** (2021)

- Used UnTIED Ideation Process to design a Georgia Tech souvenir
- Created various moving parts in SOLIDWORKS and assembled them
- Presented the final drawing and the documented design Process to the class

## EXTRACURRICULAR ACTIVITIES

**Georgia Tech Experimental Rocketry Club - Combustion Team Member** (2022 - Current)

- Designing a thrust plate and corresponding avionic support structure

**University Consortium for Applied Hypersonics - Research Contributor** (2022 - Current)

- Developing and synthesizing IR-Transparent materials for hypersonic uses

**Ringle - English Tutor** (2022 - Current)

- Working with Korean business people to improve their conversational and formal English

**Robotics - Team Builder** (2016 - 2017) (2019 - 2020)

- Designed, modeled and fabricated the driver's station
- Perfected the anodization process for various parts

**Horvitz YouthAbility - Active Volunteer** (2019 - 2020)

- Mentored disabled and at-risk youth through sports

**Look Up to Cleveland - Board Member** (2018 - 2019)

- Developed solutions to modern problems facing the city of Cleveland
- Presented these solutions to various Cuyahoga County public officials