# **Thomas Zaffiro**

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Website: https://tzaffiro3.github.io/websiteCV/

### **EDUCATION**

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

Graduation December 2023

Graduation December 2024

- Major: Aerospace Engineering
- Aerospace Engineering Honors BS/MS Program

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; Python; TensorFlow; Swift

# **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