## Francesca Turrinelli

fturrinelli3@gatech.edu | 773-490-6128 | www.linkedin.com/in/francesca-turrinelli

#### **Education**

## Georgia Institute of Technology | Atlanta, GA

August 2021 – Present

Bachelor of Science in Mechanical Engineering GPA 3.85/4.00

Expected Graduation, May 2025

Minor: Industrial Design

### Experience

## General Motors | Warren, MI

June 2021-August 2022

## Robotic Vision Engineering Intern

- Engineered mobile manipulator by integrating autonomous mobile robots, collaborative robotic arms, and 3D sensors
- Developed standards and safety protocol for deployment of projects involving Photoneo robotic vision
- Obtained FANUC HandlingTool Operation and Programming Certification

## mHUB | Chicago, Illinois

June 2021 – August 2022

#### **Prototyping Shop Intern**

Leading hardtech and manufacturing innovation center, provides resources and mentorship to entrepreneurs

- Managed and trained team of 5 interns to design customizations to streamline processes
- Trained in and utilized various prototyping equipment for internal and mHUB client projects

# Windy City Lab | Chicago, Illinois

June – August 2020

Intern

Provides consulting and workshops in hardware, software, and firmware for IoT Products

Prototyped a kit to teach IoT development at the university level

### **Leadership and Activities**

#### Georgia Tech Off Road | Atlanta, Georgia

September 2021 – Present

#### Team Lead 2023-present, Chassis Lead 2022-2023

Baja SAE competition team. Students design, manufacture, and compete vehicles to survive intense off-road conditions

- Manage team of 40+ members to design and compete off-road vehicle using project management strategies
- Raise \$30,000+ in sponsorship donations
- Designed and manufacture steel tube frame, optimizing components using FEA and ergonomics analysis
- Integrated 5 sub-team designs and components into the car for serviceability

## Student Competition Center General Body | Atlanta, Georgia Secretary

April 2022 – April 2023

Governing Board for 7 vehicle and robotics competition teams

- Organize outreach events for 700+ students to better team culture and increase high school interest in engineering
- Maintain organization of Student Competition Center materials and documents

#### Georgia Tech Ski and Snowboard Club | Atlanta, Georgia

September 2021 – Present

## Assistant Director of Sponsorships 2023-present, Competitive Team Lead 2022-2023, Race Team Safety Officer

Competes in USCSA's Southeast Division throughout North Carolina and Virginia; organizes recreational trips during the skiing season

- Organized 20+ people to 4+ out-of-state ski and snowboard competitions
- Uphold standards of safety by becoming a certified safety officer
- Race competitively and placed 10<sup>th</sup> of 50+ in Women's Giant Slalom

#### Grand Challenges Living-Learning Community | Atlanta, Georgia

September 2021 - May 2021

Students work on project teams to identify and work on complex challenges and make sustainable, authentic change

- Focused on increasing safety for micro mobility users to increase ridership and decrease carbon emissions
- Identified a "grand challenge", conducted extensive research, interviewed over 25 experts in the field

#### **Skills and Interests**

**Technical:** CO2 and fiber laser cutters; tabletop, SLA, and SLS 3D printers; CNC routers; waterjets; UV printers; CNC mills and lathes; techniques such as welding, powder coating, and woodworking

**Software & Platforms:** SolidWorks, Fusion360, Ansys, FANUC Roboguide, Photoneo Locator Studio, Adobe Illustrator **Programming:** Java, C++, MATLAB, KAREL, Python

**Graphic Design:** Co-Founder of Graphic Design Club, Head of Marketing for numerous activities, designed GT Off Road livery **Public Speaking:** Model United Nations, various public speaking roles as leader of clubs/activities