# Ita Futran

Mobile: 914-772-3762 | Email: icfutran@mit.edu

## **Education**

## **Massachusetts Institute of Technology**

September 2020 - May 2024

Mechanical Engineering with a focus in Robotics, GPA 4.7/5.0

## **Experience**

#### **Undergraduate Researcher**

September 2021 - August 2022

Sea Grant Lab, MIT, Cambridge, Massachusetts

- Designed and prototyped a new flipping mechanism for an oyster cage flipping boat.
- Began a new project on imitating the water dissipation from coral reefs.

### **Mechanical Engineering Intern**

June 2022 - August 2022

Macco Robotics, Malaga, Spain

- Redesigned robotic arms for the humanoid bartender, Kime.
- Lead a team of interns in creating a coffee dispenser for Nestle.

#### **Undergraduate Researcher**

June 2021 - September 2021

Computer Science and Artificial Intelligence Lab, MIT, Cambridge, Massachusetts

- Programmed a wrapper using Robotic Operating System for a DJI drone and a simulator.
- Collaborated in a team with two other undergraduate students and a PHD researcher to create a cohesive system for collecting data.

#### **Assistant Researcher Intern**

June 2018 - August 2018

Organic Robotics Lab, Cornell University, Ithaca, New York

- Worked under PHD students finalizing prosthetic hand designs using Autodesk Fusion.
- Personal project designing and resin-printing a virtual reality feedback glove.

## **Leadership and Awards**

- Co-founder of MIT Arcturus: Co-founded a new autonomous boat team at MIT.
- **Innovation Award at MakeMIT:** Worked with a team to create a prototype for an automatic shoelace tightener for the disabled community.

# **Personal Projects**

- **Internal Combustion Engine**: Used CAM software along with manual milling and lathing to create a functioning internal combustion engine.
- **Electric Go-Kart**: Built a wooden base and reused electrical components from various other broken machines to create a steerable electric go-kart.
- Arcturus.mit.edu: Designed, coded, and published a website for my build team.
- **Tank-like Robot**: Manufactured an autonomous tank-like robot using machining skills and CAD. Implemented a unique tread system with 3D printed sprockets.

## Skills

Software: 3D design in Autodesk Fusion 360; Solidworks; ROS

**Machining**: Experience prototyping with wood, metal, plastics, and resins. Extensive training in machine shop tools such as mills, lathes, and other common machining equipment.

**Programming Languages:** Python; C++; Javascript (Basic)