#### **ONITIANA M. RAZAFIMINO**

Pelham, AL

(205)963-2253 | <u>omr36@msstate.edu</u>

Personal website: minohery.github.io

### **OBJECTIVE**

Ambitious and hard-working student eager to pursue research and make an impact in the field of robotics.

#### **EDUCATION**

Mississippi State University, Starkville, MS Bachelor of Science in Aerospace Engineering Overall GPA: 3.87/4.0 May 2025

### **HONORS AND AWARDS**

### Mississippi State University

- President's List in Spring 2023 and Fall 2024
- Dean's List in Spring 2024
- Transfer Scholarship
- Phi Theta Kappa Scholarship
- Transfer Non-Resident Tuition Scholarship

### **Gadsden State Community College**

- President's List in Fall 2021 and Spring 2022
- Outstanding Student in Mathematics and Pre-engineering

## **WORK EXPERIENCE**

Content Creator, YouTube (@Mino Razafimino)

February 2025 - Present

- Explain how different types of path-finding algorithms work
- Implement these algorithms on Python

Prospective Graduate Research Assistant, Autonomous Systems Lab, Starkville, MS

November 2024 - Present

- Implement Euler solver and RK4 solver on Python (Euler solver and RK4)
- Develop a code simulating the effect of integrators on second-order systems

### LEADERSHIP AND INVOLVEMENT

Artificial Intelligence Club, Mississippi State University, Starkville, MS

September 2024 - December 2024

Promoted the ethical use of Artificial Intelligence and Machine Learning

## **ACADEMIC EXPERIENCE**

Effect of Riblets on propeller blades research, Applied Aerodynamics and Aeroacoustics Research Group August 2024 – Present

- Implementing MATLAB code to interpret acquired data
- Modeling of 3-D vortex generators using SolidWorks
- 3D-printing vortex generators by placing them on propeller blades to test their effect on drag

### Panel Manufacturing Project, Patterson Laboratory, Starkville, MS

August 2024 - December 2024

Modeled a 10"x8" panel and its stiffeners on SolidWorks similar to those found in actual aircraft fuselages

- Manufactured the aluminum panel previously modeled through SolidWorks using folding and drilling machines, while adhering to safety rules
- Tested the resistance of the stiffened panel using the Universal Testing Machine Shimadzu
- Used Abaqus to visualize the crippling of the panel

# Vibrations project, Mississippi State University, MS

August - December 2023

- Modeled graphs of damped, undamped, and forced vibrations using MATLAB
- Implemented a graph showing a paint can trajectory with varying mass using the Ordinary Differential Equations solver function on MATLAB

### **SKILLS**

Languages: Trilingual: French, Malagasy, English

Programming languages: Python, MATLAB, C++, JavaScript, G-Code

Tools: AutoCAD, SolidWorks, Abagus, ANSYS, LabVIEW

Web Framework: Django

### **CERTIFICATES**

### **IBM**

Python for AI and Development Projects

July 3, 2022 **Introduction to Cloud Computing** March 25, 2022

# **OPENCLASSROOMS**

Retrieve Data Using SQL August 28, 2020