

ntl562@my.utexas.edu • (737) 888-9029 (texts only) • linkedin.com/in/ngly712

## **OBJECTIVE**

Work with leading faculty, postdoc, and graduate students on computational projects during a Moncrief Summer 2025 internship at UT Austin

Expected May 2026 GPA: 4.0/4.0

#### **EDUCATION**

## The University of Texas at Austin

Bachelor of Science in Aerospace Engineering Bachelor of Science in Physics

#### **RELEVANT COURSEWORK**

Low-Speed Aerodynamics Lab, Solid Mechanics, Structural Dynamics, Classical Dynamics, Modern Physics, Engineering Computation (MATLAB), Computational Programming (C++), Differential Equations, Vector Calculus, Linear Algebra, Waves and Optics (Python), Spacecraft Dynamics, Flight Dynamics, Electromechanics Lab (LabVIEW), Linear Systems, Probability, Engineering Design (Solidworks)

## **SKILLS**

Java, MATLAB, Python, C++, Solidworks, LabVIEW, Microsoft Office applications Strong interpersonal and team skills Fluent in Vietnamese (read/write/speak)

### **ACADEMIC EXPERIENCE**

Semi-autonomous Machine Learning Model - CLeAR Lab - November 2024 to present

- ★ Replicate the results of the DRIPS method for predator-prey systems, differential equations with variable coefficients, heat transfer, and forced oscillations
- ★ Convert MATLAB functions into Google JAX (Python package) for compatibility with an autonomous quadruped

Bending Strain of Airplane Wing with Winglet - Electromechanical Systems - April 2024

- ★ Collaborated with others to craft a circuit with strain gauges in a Wheatstone bridge, amplifiers, and noise filters that would measure the bending strain of a 3D-printed winglet
- ★ Calculated the theoretical lift on a NACA6306 airfoil using finite wing characteristics to determine the bending moment for a range of Reynolds numbers (8198 to 72300)

**Impact on Flow Behavior by Golf Dimples** - Low-Speed Aerodynamics - November 2023

- ★ Determined the separation angle of fluid flow over golf balls with dimple depths ranging from 0.00 to 3.81 mm using an LDA system
- ★ Assisted partners in developing a MATLAB algorithm to estimate the velocity of the fluid relative to the surface of the golf ball

# **ACCOMPLISHMENTS**

- ★ Engineering Honors, August 2022 to present
- ★ Volunteer, Run for the Water, November 2022
- ★ Bennett Exam for Differential Equations, 1st prize, May 2023
- ★ Member, Alpha Lambda Delta, May 2023 to present
- ★ Member, Pi Eta Sigma, May 2023 to present
- ★ UT Externship, Southwest Research Institute, January 2024
- ★ Distinguished College Scholar, April 2024
- ★ Volunteer, Central Texas Food Bank, July 2024
- ★ Bennett Exam for Linear Algebra, 2nd Prize, December 2024

Work Authorization: U.S. Citizen