# Joshua Terranova

Student at the University of Southern California(USC)

7748 Via Sorrento
Burbank, CA 91504
(818) - 515 - 9043
joshterranova26@gmail.com
jjt 373@usc.edu

#### **EXPERIENCE**

# National Aerospace and Space Administration — NASA NCAS Mission 1

JANUARY 2025 - FEBRUARY 2025

Researched the various mission directorates as to which NASA categorizes and develops a respective mission, using resources such as NASA TechPort and NASA NTRS. Throughout this internship, I produced weekly status reports, a cumulative research assignment, and a final project promoting a potential solution to a NASA pain point in the form of a presentation.

# **National Aerospace and Space Administration** — *NASA NCAS Mission 2*

APRIL 2025 - MAY 2025

Assigned to a team of 7 people, with each person having a specific role within the team. During this internship, my role as a software engineer dictated having to research and implement various computer systems, while having to explain my proposal to the elected Project Manager of the team. This internship also required the team to cumulatively contribute to a weekly status report submission in an official NASA document. The internship concluded with a fully structured roadmap simulating a mission to the Moon from Earth.

# National Aerospace and Space Administration — NASA L'SPACE NPWEE

MAY 2025 - AUGUST 2025

As a member of a team of 15 people and multiple Subject Matter Experts(SMEs), this internship was significantly involved, as each role, from leadership positions to individual roles, contributed to the team effort in achieving the final goal of writing a 14-page technical proposal and a quad chart regarding a potentially funded concept.

As a Software/Computer Engineer, I authored the Technology Merit and Work Plan, which included the Technological Readiness Level (TRL), Key Challenges and Risks, Key Performance Parameters, and various other sensitive and proprietary information. This internship also required me to write a NASA Technical Report(NTR) and a Disclosure of Invention and New Technology.

# Artificial Intelligence Los Angeles — COHORT 5

JUNE 2025 - JULY 2025

My role in a team of 9 people as a software engineer was to curate an algorithm that utilizes Artificial Intelligence(AI) and Machine Learning to identify the progression of pneumonia, while rooting out false positive cases. This algorithm achieved a sub 1% rate of error and was accomplished

#### **SKILLS**

**Collaborative Teaming** 

**Proposal Writing** 

Communication/Leadership Skills

Computer-Aided Design in Autodesk Fusion360 / Siemens

Experience in Python

Experience in C++

Experience in JavaScript

Experience in HTML5

Experience in CSS3

Experience in Swift/SwiftUI

Experience in LaTeX

**Upper-Level Mathematics** 

**Physical Sciences** 

#### **AWARDS**

Summa Cum Laude

A.S. Mathematics

Dean's List

#### **LANGUAGES**

English

Filipino

using PyTorch, Python, Kaggle, and Jupyter Notebook. This internship concluded in an extensive presentation demonstrating the characteristics of our algorithm, methodology, and our choice of study.

#### **EDUCATION**

# University of Southern California, Los Angeles, CA — B.S. Computer Science

JANUARY 2026 - PRESENT

Pursuing a Bachelor's Degree in Computer Science at the Andrew Viterbi School of Engineering at USC, with a minor in Mechanical Engineering and Robotics, while maintaining a GPA of 3.97. Expected to graduate in the Summer of 2028.

### **Los Angeles Mission College,** Sylmar, CA — A.S. Mathematics

2024 - JUNE 2025

Graduated from LAMC with Summa Cum Laude Honors, and an Associate's Degree in Mathematics while maintaining a GPA of 4.0.

# Johns Hopkins Center for Talented Youth — *Science/Mathematics*

### Stanford Online High School — AI/ML

Studied the application, foundational and intermediate knowledge of Artificial Intelligence, LLMs, and Machine Learning

## Lycée International School of Los Angeles - High School Diploma

Graduated in 2023 from an International Baccalaureate (IB) – certified high school.

### **PROJECTS**

### Personal Portfolio Website

Created a website to showcase my skills/experience as well as my story. This was also an exercise to test my knowledge of HTML5, CSS3, and JavaScript.

### Tower of Hanoi - Demonstration of Recursion

Authored a research project regarding the concept of recursion and its application in mathematics, using LaTeX, pseudocode, and an algorithm written in Python, showing the concept in the Tower of Hanoi puzzle.

# Clipboard Manager for MacOS

Made a Clipboard Manager using Swift and SwiftUI in XCode that is capable of tracking, filtering, tagging, and searching for items that are copied to the clipboard, while also being able to clear the history after a certain period of time, and also uploading the history to iCloud. This consists of text, rich text, images, saved images, and files.