Phuoc (Joseph) Tran

ptran3@alumni.nd.edu linkedin.com/in/jp-tran github.com/jp-tran jp-tran.github.io

PROJECTS

MIT Biomimetic Robotics Lab Website

A revamp of the original lab website with a more modern and responsive UI, built using React (in progress)

- Built a maintainable Gatsby application using Typescript, utilizing Redux for state management
- Improved UX with the addition of a responsive navbar as well as search and filter features
- Organized project structure such that site content can be easily updated by non-developers

Discord Trivia Bot

A Discord bot that delivers trivia questions and evaluates the correctness of answers, built using Python

- Used concurrent programming with discord.py to listen and respond to commands
- Managed a profile for each server member with constant time access to player scores for various question categories

Snake Game

My final project for C/C++ Programming, built using C++

- Used a double-ended queue to allow for constant time determination of the snake's location on screen, regardless of its length
- Created a high scores system to track and update top scores and the corresponding players

WORK EXPERIENCE

Teaching Assistant

The Summer Science Program

June 2020 – July 2020 Remote

- Helped instruct 36 high school students in college math, astrophysics, and Python programming, culminating in an asteroid orbit determination research project

Military Project Engineering Intern

Williams International

May 2019 – August 2019 Pontiac, MI

- Collaborated with aerospace, electrical, and mechanical engineers on other teams to integrate all components of a gas turbine engine
- Created Python scripts to automate the processing and plotting of large sets of data in the engine acceptance test procedure, reducing the task from hours to seconds

Summer Intern

Notre Dame Turbomachinery Lab

May 2018 – July 2018 Notre Dame, IN

- Assisted technicians and aerospace engineers with wind tunnel tests of gas turbine engine components
- Developed a 1-D air flow model in MATLAB to aid in the design and modification of wind tunnels

EDUCATION

University of Notre Dame

Bachelor of Science, Aerospace Engineering

2016 – 2020

GPA: 3.74/4.00

LANGUAGES

Python | TypeScript | JavaScript | C/C++ | MATLAB

SKILLS

HTML | CSS | React | Node.js | Express.js | MongoDB | Git | Unix | LaTeX

COURSEWORK

University of Notre Dame:

- C/C++ Programming
- Intro to Artificial Intelligence

Coursera:

- UCSD Data Structures
- Stanford Algorithms I

HONORS

- Sigma Gamma Tau Aerospace Engineering Honor Society
- Dean's List
- Boeing Scholar
- Asian Pacific Islander American Scholar
- QuestBridge Scholar

ACTIVITIES

- U. of Notre Dame Class of 2020 Commencement Planning Committee Member, 2020
- Aerospace/Mechanical Engineering Teaching Assistant, 2019-2020
- Building Bridges Peer Mentor for First Year Engineers, 2019-2020
- Vietnamese Student Association President, 2019