# Quan Nguyen

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#### **BACKGROUND**

I am a Computer Science junior working diligently towards becoming a full-stack software developer.

With my knowledge of UI/UX design, I enjoy solving front-end Web Development problems and creating the best user experiences for users. I also spend time learning new technologies and best practices to become a better engineer.

# **EDUCATION**

University of South Florida

Tampa, FL

Bachelor of Science in Computer Science

USF GPA: 3.9 / 4.0

Expected: May 2025

Relevant coursework: Software Engineering, Secure Coding, Operating System, Cryptography Theory and Practice, Introduction to Artificial Intelligence, Analysis of Algorithm, Data Structures

Le Hong Phong High School for the Gifted

HCMC, Vietnam

High School Diploma

GPA: 8.5 / 10, SAT I: M: 800 V: 740, Foreign language IELTS: 7.5

June 2020

#### TECHNICAL SKILLS

Operating Systems: Windows 11/10/9X/Vista, Linux (Ubuntu), and macOS

Languages: C/C++, JavaScript, Ruby, HTML, CSS, Python (Jupyter Notebook), Dockerfile, and Shell

Frameworks: Bootstrap, Tailwind CSS, Ruby on Rails, Matplotlib, NumPy

Library: ReactJS, Keras, Scikit-learn, OpenSSL, LibTomCrypt, ZeroMQ, GMP

Databases: SQL (SQLite3) and Microsoft Access

Other: Git, Docker, Google Cloud Platform, Arduino hardware and software development

## KEY PROJECTS

### VibeVerse – Full-stack Developer

April 2024 - Current

- Description: An authenticated social media platform that supports posting with attached files, thumbs-up, comments and profile editing.
- Technologies: JavaScript (React), HTML, CSS (Tailwind CSS, Bootstrap), SQL.
- Responsibilities: Developing database & authentication with JSON Web Tokens, posting-upvoting-commenting functionality with React through HTTP requests, user-friendly front-end design, and unit testing.

## Smart Task Automation Platform - Full-stack Developer

Fall 2023 - Spring 2024

- Description: A task management software that supports task CRUD and automates pushing stored tasks to free dates, displayed on homepage calendar.
- Technologies: Ruby on Rails, HTML, CSS (Tailwind CSS, Bootstrap), JavaScript, SQL.
- Responsibilities: Developed homepage calendar and task functionalities & automation with Ruby scaffold and JavaScript, task email notification with Mailgun technologies, front-end design, and unit testing. The software was consistently tested to stay performant at 500 tasks with up to 3ms delay.

## Deep Learning Face Recognition Models – Back-end Developer

Fall 2023

- Description: A program that builds, trains, and analyses to evaluate multiple deep learning face recognition models with CMC curves and confusion matrices.
- Technologies: Python (Jupyter Notebook), Keras, Scikit-learn.
- Responsibilities: Trained, tested, and reported with CMC curves and confusion matrices on several RNN configurations, namely vanilla RNN, CNN & augmentation, and Bernoulli Naïve Bayes baselines.

# Video Speedy Codec and Visualizer - Full-stack Developer

Spring 2023

• Description: A sixfold fastened binary .ppm image mass compressor and visualizer.

- Technologies: C, Python.
- Responsibilities: Developed threading semaphore algorithm to fasten the binary compression and visualized the compressed file with Pygame library. The software could compress videos consistently 6 times faster than software with the same algorithm but no threading, tested with up to 18000 frames with a 30ms delay.

# RAID Sector Disk Mapper & Data Dumper - Back-end Developer

Fall 2022

- Description: An OS-based software that maps RAID sector locations into appropriate hard disk sectors and dumps ordered data with maximized fault tolerance for level 0, 1, 01, 10, 4, and 5 RAIDs.
- Technologies: C.
- Responsibilities: Developed algorithms for each RAID to map input data(s) into according hard disk location(s) and to detect working disks and recover and dump data if not lost. The software supported 6 mentioned RAID levels and was tested with up to 3 billion stripes, sectors, and queries; and chunk size of 16.

## Wall-E Following Robot - Software Developer

Spring 2021

- Description: A line-following robot with 100% success rate in a complex environment.
- Technologies: Arduino hardware and software
- Responsibilities: Led a team of 5 using Agile methodology and Scrum framework to develop algorithms for Wall-E robot to follow a colored line using ultrasonic sensor, completing the project within the timeline and budget with 100% success rate in a complex environment.

## **HONORS & AWARDS**

Judy Genshaft Honors College, Direct Entry, University of South Florida Merit-Based Green and Gold Presidential Award, University of South Florida Fall 2021

Fall 2021

Certificate of Achievement for Excellent Leadership Skills, Youth Astronaut Model United Nations national conference

Summer 2020

## **VOLUNTEER**

#### USF Hackathon - HackaBull 2023

Spring 2023

• Responsibilities: in a team of 20, set up technological settings and fixed technological problems; organized team formation, registration process, sponsorship; and handled feedback collection and follow-ups

#### USF Hackathon - HackaBull 2022

Spring 2022

 Responsibilities: in a team of 16, organized team formation, registration process, sponsorship and handled feedback collection and follow-ups.

# Southeast Regional Conference 2022

Spring 2022

• Responsibilities: in a team of 10, organized registration process, set up venues and attendee accommodations and handled catering arrangements.