

# Hoai-Nam “Tony” Le

Chantilly, VA | (571) 274-5883 | hnl7vwd@virginia.edu | <https://github.com/tonyhnl> | <https://tonyhnl.github.io>

## EDUCATION

### University of Virginia School of Engineering and Applied Sciences

Charlottesville, VA

Study: B.S. Computer Science, Engineering Business Minor, Data Science Minor

Expected May 2024

- **Relevant Coursework:** Advanced Software Development Methods, Theory of Computation, Program & Data Representation, Linear Algebra, Algorithms, Machine Learning, Software Testing, Computer Architecture

## SKILLS

- **Experienced:** Python, Java, C++, HTML, TailwindCSS, Bootstrap CSS, PHP, Microsoft Power Apps
- **Proficient:** JavaScript, Django, MySQL, Docker, Microsoft Power Apps, SharePoint, Git, Node.js, React, Go, Drupal
- **Languages:** English, Vietnamese, Spanish

## PROJECTS

### PATHFINDING ALGORITHM VISUALIZER

- Designed a Java GUI that demonstrates the A\* pathfinding algorithm on a grid.
- Allows user to pick a beginning/end node and draw barriers, the program will find the shortest path from the two nodes.

### SORTING ALGORITHMS VISUALIZER

- Developed an educational application web app that displays a visualization of multiple sorting algorithms.
- Implemented features that allow the user to change the speed of the animations, randomize and resize the bars.

### HANDWRITTEN DIGIT RECOGNITION WEB-APP

- Trained and utilized a CNN model to create a Python web-app that takes in user drawn input and predicts what digit it was.
- Researched and implemented Streamlit framework for deployment.

### HARMONY – DISCORD MUSIC BOT

- Created a Discord Bot that can search for and play music within a voice chat – allows for user to stop, pause, queue, and shuffle.
- Implemented using discord.js, Node.js, Discord.js, NPM, FFMPEG, and Docker.

## EXPERIENCE

### NATIONWIDE IT SERVICES

Fairfax, VA

IT and Software Development Intern

2022 - Present

- Worked on project tasks including web app design/development, database scripting, code reviews, and technical documentation.
- Worked as lead developer, business analyst, and quality control for NIS' USGS team's communications website.
- Worked as lead developer, business analyst, and quality control for the company's HR automated recruiting application

### CODE FOR CHARLOTTESVILLE

Charlottesville, VA

Software Developer

2022 - Present

- Cooperated with local government to organize and work on open-source computer science service projects in Charlottesville.
- Utilized open data for various projects to improve citizen knowledge.
- Scraped Charlottesville's streetlight data to build a tool that maps each individual streetlight and displays information about them.

### UVa BRIDGES INTERNSHIP

Charlottesville, VA

Blockchain Developer

2022 - 2022

- Worked alongside alumni to research the Ethereum blockchain and its upcoming practicality in the modern world.
- Learned the Solidity programming language and how to use the REMIX IDE.
- Built and deployed smart contracts on the Ethereum blockchain to develop decentralized applications.

## EXTRACURRICULAR ACTIVITIES

### UVa COMPUTER NETWORK SECURITY CLUB

Charlottesville, VA

Member

September 2020 – Present

- Learned about various topics and current events in computer/cyber-security during monthly meetings.
- Developed security tools and challenges in order to keep the UVa cyber-space more sustainable.

### UVa MACHINE LEARNING CLUB

Charlottesville, VA

Member

September 2020 - Present

- Planned monthly workshops that educate students on machine learning tactics and techniques.
- Worked on various machine learning side projects with cohorts during separate meetings.