# **Andrew Tran**

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Personal Website: https://andrewtran03.github.io/ | LinkedIn | GitHub

#### **EDUCATION**

## Virginia Polytechnic Institute and State University (Virginia Tech) | Blacksburg, VA

**Spring 2024** 

B.S., Computer Science | Minor: Mathematics

Cumulative GPA: 4.00 / 4.00 | In-Major GPA: 4.00 / 4.00

**Relevant Courses:** Software Design and Data Structures, Intro to Programming in Python, Intro to Software Design (Java), Foundations of Engineering Practice, Intro to Differential Equations, Intro to Discrete Mathematics, Applied Combinatorics, Cloud Computing: Infrastructure and Services (NVCC)

## **SKILLS**

**Programming Languages and Tools:** Java, Python, C (Limited), R, HTML, CSS, JavaScript, TypeScript, Angular (Limited), Git, Kubernetes, Docker, MatLab

**Software:** Visual Studio Code, Eclipse, jGRASP, Microsoft Office, MatLab, SOLIDWORKS, Git Bash, Linux Terminal **Certifications:** Qualcomm Wireless Academy: Fundamentals of Cellular Communication and 5G Program

#### **EXPERIENCE & PROJECTS**

## Zeta Associates Inc. Internship | Fairfax, VA

May 2022 - August 2022

Software Developer Intern

- Developed a basic understanding of concepts relating to Kubernetes Clusters and Linux Containerization.
- Researched the newest applications of Unikernels, a specialized, single-address space machine image created by
  using only required OS libraries to reduce file size and increase performance within Linux-based Containerized
  Images, with selective focus on distributions such as Unikraft, Nanos/NanoVMs, HermitCore, and MirageOS.
- Implemented Unikernels into Kubernetes clusters to reduce existing levels of abstraction in modern-day solutions.
- Designed a containerized DSP Spectrogram Application (with audio-processing functionality) on a Kubernetes Cluster using Three.js, a JavaScript Library / API used for rendering 3D computer graphics on Internet browsers.

#### **Undergraduate Teaching Assistant** | *Blacksburg, VA*

**January 2022 – May 2022** 

Teaching Assistant

- Course: CS 1064 Intro to Programming in Python
  - o In-charge of producing solutions and grading 200+ students' programming assignments and projects
  - Holding 6+ office hours every week to assist students with the programming language's concepts & assignments.

# **Graph Theory Cycle Detection Program** | *Blacksburg, VA*

**April 2022** 

- Applies complex Graph Theory concepts such as DFS (Depth-First Search) to detect cycles in undirected graphs
- User enters and records the graph's vertex and edge data with the program outputting graph cycle results
- Applications in CPU/Parallel-Computing Deadlocking and Global-Position Systems (GPS)

## Thieu Nhi Thanh The (Vietnamese Eucharistic Youth Movement) | Arlington, VA

September 2010 – Present

*Team Leader (Before 2021) | Youth Leader (2021 – Present)* 

- Educates the youth about the religious teachings and doctrines associated with Catholicism.
- Reinforces the youth about the importance of Vietnamese culture and traditions.

## **HONORS**

VT Dean's List, Long Nguyen and Kimmy Duong Foundation Scholarship, Lockheed Martin STEM Scholar, AWS In-Communities Scholar

## **EXTRACURRICULARS**

Society of Asian Scientists and Engineers (SASE), Vietnamese Student Association (VSA), Galipatia Academic Living Learning Community (LLC)