Andrew Tran

Annandale, VA
andrewt03@vt.edu | (571) 789-9357
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: Android Mobile Software Development, Data Analytics and Visualization, Computer Organization I, Kubernetes Programming, Software Design and Data Structures (Java), Intro to Problem Solving in CS, Intro to Python, Differential Equations, Discrete Mathematics, Applied Combinatorics & Graph Theory, Cryptography I, Cloud Computing: Infrastructure and Services (NVCC)

SKILLS

Java, Python, C, Kotlin, R, HTML, CSS, JavaScript / TypeScript, Angular (Limited), Git, Kubernetes, Docker, MatLab, Visual Studio Code, Eclipse, jGRASP, Git Bash, Linux Terminal, Windows OS, Microsoft Office, MatLab, SOLIDWORKS, Qualcomm Wireless Academy: Fundamentals of Cellular Communication and 5G Program Certification

EXPERIENCE & PROJECTS

Zeta Associates Inc. Internship | *Fairfax, VA* **May 2022 – August 2022**
Software Developer Intern

- Developed a basic understanding of Kubernetes Clusters and Linux Containerization
- Researched and implemented 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 (selective focus on distributions such as Unikraft, Nanos/NanoVMs, HermitCore, and MirageOS)
- 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 Research Assistant | *Blacksburg, VA* **August 2022 – Present**

- Researched into the topic of Data Freshness and Age of Information Optimization, a method focused on utilizing non-linear functions to analyze and optimize data network packet transfer. Beneficial towards increasing accuracy of data collection and visualization.

Undergraduate Teaching Assistant | *Blacksburg, VA* **January 2022 – Present**

- **CS 2114 (Fall 2022):** Dedicated 10+ hours toward course labs sessions and office hours, assisting students in further learning Java paradigms, OOP principles, and formal data structures such as Stacks, Queues, LinkedLists, ArrayLists, and Binary Search Trees.
- **CS 1064 (Spring 2022):** In-charge of producing solutions and grading students' Python programming assignments and projects and holding 6+ office hours every week to assist students with the programming language's concepts & assignments. Concepts include variables / types, functions, lists, sets, dictionaries, tuples, file I/O, making simple web-based GUIs, basic OOP – classes, objects and methods, etc.

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)

HONORS & EXTRACURRICULARS

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

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