Nam Tran

408-930-8304 || natrtran@ucsc.edu || www.linkedin.com/in/nam-t-3aba41116/

Skills

Languages / Frameworks: C, C++, Python, Java, Javascript, SQL, HTML, CSS, Pytorch, Django
Tools / Technologies: Visual Studio Code, Git, Github, Virtual Machine, Bash, Linux (Ubuntu), BlueJ, Excel
Soft Skills: Problem-Solving, Verbal Communication, Organization, Motivated, Team-Worker

Education

University of California, Santa Cruz | Bachelor's Degree in Computer Science (In Progress) **Expected June 2025**

- **Cumulative GPA:** 3.78

Class Courses

- **CSE 12:** Learned to utilize the command line interface and Git to manage code across repositories.
- **CSE 16:** Utilized set theory and logical analysis of discrete mathematics to manage code control flow efficiently.
- **CSE 30 and CSE 13S:** Learned basic programming and software development principles with Python, C, and C++.
- **CSE 101:** Completed work in data structures, algorithms, and object-oriented programming concepts.
- **CSE 120:** Studied computer architecture concepts including memory allocation and assembly language.

Extracurricular Clubs

Member || Santa Cruz Artificial Intelligence **September 2023 - Present**

- Developing a Naive Bayes sentiment model to identify sentences containing inappropriate language.
- Gained general knowledge of artificial intelligence concepts and obtained experience using Google Notebooks.
- Participated in weekly AI workshops, delving into specific topics, for the SCAI Is No Limit competition.

Member || Google Developer Student Club **September 2023 - Present**

- Collaborating with a team to develop an application to promote volunteering through a game-based system.
- Familiarized with diverse Google technologies, including Figma, Firebase, Flutter, and other relevant tools.
- Engaged in weekly workshops contributing to team preparation for the annual Google Solution Challenge.

Volunteering Experience

First Violinist || San Jose Youth Symphony Philharmonic Orchestra **January 2018 - June 2021**

- Participated in weekly rehearsals and sectionals under the supervision of professional conductors and musicians.
- Trained to pay attention to detail in learning complex classical repertoire to ensure a high-level performance.
- Fostered teamwork by collaborating with many instrumentalists to ensure the articulation of the orchestra.
- Developed discipline and time management to manage a practice schedule alongside academic responsibilities.
- Showcased musicality through various concerts at venues in San Jose, Uruguay, and Argentina.

Projects

File Encryption

- Made an encryption system utilizing the RSA algorithm to enhance file security against unauthorized users.
- Designed a public and private key-generated program using a random number-generated seed to ensure security.
- The project allowed for secure information transfer between the sender and receiver.

Multithreaded HTTP Server

- Built a multithreaded HTTP server with support for concurrent handling of GET and PUT requests.
- Increased server performance proportional to the number of requested threads by enforcing mutual exclusion.
- Supports accurate handling of requests with both identical and unique URIs which enhances the server's speed.

Text Firewall

- Utilized filtering techniques to parse through file text and filter out certain words.
- The project accesses specified text files while inserting a list of banned words into memory for efficient filtering.
- The project also initiates a warning system that alerts users of the usage of banned words.

File Compressor

- Implemented a file compressor program in C that saves file space up to 40% using the Huffman algorithm.
- Performs file compression and decompression using binary information from multiple input sources.
- Excels in parsing large file sizes with a significant amount of bytes while making file management more optimal.

CIFAR-10 Model Test

- Designed a simple Flask web application with an AI model that classified images into ten categories.
- The model was trained with the Pytorch CIFAR-10 dataset using Google Colab.
- Achieved 80% accuracy through successfully implementing transfer learning with the ResNet neural network.