TIMOTHY WU

Permanent Address:
8491 Link Hills Loop
Gainesville, VA 20155

(571) 635-6685
timothywu02@gmail.com
www.linkedin.com/in/timothypwu

Current Address:
6000 Heather Drive, Apt. A
Blacksburg, VA 24060

EDUCATION

B.S. Computer Science and Minor in Mathematics - Blacksburg, VA

Virginia Polytechnic Institute and State University

Expected May 2023

- GPA: 4.00

EXPERIENCE

Undergraduate Researcher at the InfoVis Lab @ VT - Blacksburg, VA

February 2022 - Present

- Improved the research team's current Jupyter notebook to provide options for multiple dimension reduction algorithms such as MDS, PCA, T-SNE, and UMAP.
- Streamlined the notebook to allow easier user access for adding custom dimension reduction algorithms
- Collaborated with one other student to configure JavaScript graphics for faster runtime and instant response changes
- Currently working on a two-dimensional layout for the notebook to increase user experience from the traditional notebook
- Research Group Website: https://infovis.cs.vt.edu/

Undergraduate Teaching Assistant at CS @ VT - Blacksburg, VA

January 2022 - Present

- Held ten office hours a week to help students grasp the fundamentals of Python programming in CS 1064: Intro to Python Programming
- Graded and provided feedback on programming assignments to foster improvement among the students

Software Engineering Intern at Zeta Associates, A Lockheed Martin Company – Fairfax, VA

May 2021 – August 2021

- Designed a reliable failover system that would migrate stateful resources across Kubernetes Clusters using Velero and MinIO
- Programmed shell scripts to automate the migration process based on Prometheus metrics
- Collaborated with two other interns to deploy, network, migrate, and monitor full-stack applications across a network of Kubernetes clusters
- Configured service meshes for Kubernetes clusters to manage microservice communication and to configure multi-cluster deployment
- Wrote external plugins for Velero in GoLang that would change the names of Persistent Volume Claims to support parallel operations

SKILLS

- Knowledge of working and collaborating on GitHub
- Programming Languages: Java, Python, C, SQL, MATLAB
- Tools and Technologies: Kubernetes, Docker, Android Studio
- Linux-based environments for software development

RELEVANT COURSEWORK

- AWS Cloud Computing
- Computer Organization
- Data Structures and Algorithms
- IT Database Design

PERSONAL PROJECT

Login Text Editor

- Java project created in Android Studio that saves data from a text editor between logging in and out
- Utilized Google Firebase as the main database to store user credentials and saved texts
- Project Link: https://github.com/TomWoah123/Log-In-Screen