TIMOTHY WU

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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

GPA: 4.00 / 4.00

Expected May

2023

CERTIFICATIONS

Certified Kubernetes Application Developer – Issued by The Linux Foundation

July 2022

Certified GitLab Associate – Issued by GitLab

May 2022

EXPERIENCE

Software Engineer Intern at CACI International - Ashburn, VA

Designed a single page web application using ReactJS and GatsbyJS technologies

May 2022 -Present

- Configured GitLab CI pipelines to build the web application using Docker and deploy to AWS Elastic Container Registry and GitLab Pages
- Created dashboards using Power BI to better visualize incident and management data
- Served as the scrum master managing eleven other interns working in an Agile environment with bi-weekly sprints

Undergraduate Researcher at the InfoVis Lab @ Virginia Tech - Blacksburg, VA

February 2022 -Present

- Improved the research team's current Jupyter notebook to provide options for multiple dimension reduction algorithms
- Streamlined the notebook to allow easier user access for adding custom dimension reduction algorithms and customizing algorithm parameters
- Implemented image plot points for graphs using external Python image processing libraries
- Research Work Link: https://github.com/TomWoah123/AndromedaJupyter

Undergraduate Teaching Assistant at CS @ Virginia Tech - Blacksburg, VA

January 2022 -

• Held ten office hours a week to help students grasp the concepts of advanced software design and data structures in CS 3114: Data Structures and Algorithms

 Produced project help videos and provided feedback on programming assignments to foster improvement among the students

Present

Cloud Engineer Intern at Zeta Associates Incorporated - Fairfax, VA

Designed a reliable failover system that would migrate stateful resources across Kubernetes Clusters using Velero and MinIO

May 2021 -August 2021

- 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

SKILLS

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

RELEVANT COURSEWORK

- Cryptography
- Computer Organization
- Data Structures and Algorithms
- Combinatorics and Graph Theory