

Michael Yoo

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EDUCATION

The George Washington University
Bachelor of Science in *Computer Science*
Minor in *Data Science*

2021 - Expected Graduation: 2025

WORK EXPERIENCE

Student Research Specialist III - George Washington University

09/24 - Present

- Leading the development of a database as the sole technical contributor to catalog images of flags with mourning quotes placed at the Washington Memorial by families affected by COVID-19, providing a lasting resource for researchers and future generations.
- Transcribing and structuring mourning messages into a standardized format using SQL, enhancing the accessibility and long-term preservation of these cultural artifacts for historical research.
- Identifying trends in visual and textual data to inform ongoing studies on public mourning practices, contributing valuable insights into how grief is publicly expressed during the pandemic.
- Providing technical expertise, ensuring the database meets academic research and archival standards, and playing a pivotal role in shaping how this historical data will be used in future studies.
- Collaborating with non-technical team members to translate project needs into practical technical solutions, with contributions highly regarded and influential in shaping project outcomes.

Software Engineering Intern - Corsha

05/24 - 08/24

- Optimized the Corsha automated testing suite by replacing custom methods with standardized tools, resolving 10+ recurring test failures, and improving reliability.
- Increased testing efficiency by implementing environment reuse, saving 40% of testing time, which reduced test cycles and allowed engineers to focus on feature development.
- Integrated Sonarqube for automated code reviews, ensuring early detection of issues and maintaining high code quality standards.
- Utilized Ansible, Kubernetes, and GoLang for deployment automation and testing coverage.

Software Engineering Intern - KnackWorks

05/23 - 08/23

- Improved data accessibility and visualization on the DaaS project using GoLang, Python, Kubernetes, ELK, and Kafka, achieving a 25% faster query response time.
- Deployed Logstash in Kubernetes for PostgreSQL-to-Elasticsearch migration.
- Developed a GoLang service with an AWS S3-compatible storage endpoint, cutting data retrieval times by 15% and optimizing cloud storage efficiency.
- Collaborated with stakeholders in agile sprints, ensuring that technical solutions aligned with project goals and customer needs, demonstrating strong teamwork and communication.

TECHNICAL PROJECTS

xv6 Container Manager - C

[Project Portfolio](#)

Designed and implemented a container management system on the xv6 operating system, enabling efficient process isolation and resource allocation. The system provided support for container creation, execution, and management within the xv6 environment.

Gwack Slack Simulator - Java

Developed a multithreaded client-server chatroom with a custom Java GUI, supporting real-time messaging, member list updates, and dynamic theme switching.

Multi-classification Image Detection - Python/Tensorflow/Machine Learning

Developed a Multi-Output Convolutional Neural Network for simultaneous object detection and classification. Built on MobileNetV2, the model includes a region proposal layer for precise bounding box prediction and a classification layer for categorizing detected objects.