Michael Yoo

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EDUCATION

2021 - 2025	Bachelor's of Science degree in *Computer Science* Minor in *Data Science* **The George Washington University**

WORK EXPERIENCE

Software Developer/Engineer Intern - KnackWorks   05/23 - 08/23

– Focused on the DaaS project, leveraging GoLang, Python, Kubernetes, ELK, and Kafka to drive advancements in data accessibility and visualization, directly contributing to a 40% improvement in query response times.

– Led the deployment of Logstash within a Kubernetes cluster for PostgreSQL-to-Elasticsearch data migration, resulting in a 30% enhancement in search functionality.

– Conceived and executed proof of concepts for advanced Kibana visualizations and Elasticsearch data integration, achieving an 80% reduction in time to import and visualize data, significantly enhancing data visualization capabilities and streamlining dataset imports.

– Developed a GoLang S3-compatible endpoint for direct storage querying and designed a system for near real-time storage condition visualizations, significantly accelerating real-time data updates and access, which reduced data retrieval and analysis times by 15%.

– Actively participated in agile development sprints, demonstrating strong collaboration and communication skills, which facilitated the team's ability to meet deadlines and adapt to changing project requirements.

– Facilitated project success by actively engaging with stakeholders to clarify requirements and expectations, ensuring alignment of technical solutions with project goals.

TECHNICAL PROJECTS

Directory Search Engine - C   Project Portfolio

Implemented a document retrieval system that searches through a set of documents to determine the relevance of the document with respect to a search query.

GWack-Slack-Simulator - Java/Swing

Developed a chat application utilizing Java and Swing, featuring a client-server architecture that supports real-time messaging and theme customization. Implemented advanced OOP principles, threading for concurrent operations, and intuitive UI interactions through item and key listeners.

Affordable AAC - HTML/CSS/python Flask/mongoDB/Machine Learning

Devloped a Generative Augmentative and Alternative Communication (AAC) solution using Spacy and Grammarly/coedit-large models to support individuals with vocal impairments

RELEVANT COURSEWORK

- Algorithms & Data structures
- Operating System Design
- Software Engineering
- Database Systems & Team Projects
- Neural Networks
- Computer Graphics

TECHNOLOGIES

- Java
- Python
- GoLang
- C
- CSS/HTML
- JavaScript
- R
- Linux
- SQL
- MySQL
- MongoDB
- PostgreSQL