KHANH NGUYEN

khanh.ng@nyu.edu | github.com/Kn99HN

Education

New York University

May 2022

• B.A in Computer Science, GPA: 3.8

Experience

Operating System Teaching Assistant, NYU

August 2021 - Present

- Work in team of 8 to grade and answer students' question on course forum
- Help students debug labs involving multi-threaded programming, virtual memory and inode-based file system

Undergraduate Research Assistant, NYU

February 2021 – Present

- Contribute to **Snicket: Query-driven distributed tracing**
- Investigate the storage overhead of distributed tracing with Envoy and Istio
- Program hot reloading of WASM filters using Go
- Benchmark query tracing in distributed systems with different WASM filters

Software Engineer Intern, MongoDB Inc

June 2021 – August 2021

- Interned on Cloud Platform to ingest and provide deployments' metrics to 26,000 customers
- Upgraded query bar in the most used page on MongoDB Atlas, Data Explorer, to support sort, projection and collation options
- Fixed front-end bugs and implemented features for Real Time Performance Panel, Serverless Alerts and Data Explorer page with React and TypeScript
- Implemented and refactored query processor in Java server, Golang agent and proxy

Software Engineer Intern, Orenda Inc

June 2020 – August 2020

- Designed an energy consumption dashboard for clients hosted on AWS in team of 3
- Automated machine learning model for predicting daily peak of energy usage on cloud-based service, tested performance of algorithms and fine-tuned parameters
- Built API using Python, Flask, PostgreSQL and wrote frontend in React
- Improved up data scraping by 50% using asynchronous request batching

Open Source Projects

Schedge (git.io/JJu3m)

January 2020 - Present

- Maintain Schedge, an open source API for NYU course data, using Java and Javalin, to help students plan 5,000 courses more efficiently
- Engineer web scraper, parser, course registration logic and API endpoints, allowing students to register courses with an effortless user experience
- Lead an initiative to refactor CLI to be more user-friendly and reduce codebase by 20%

Technical Skills

- Languages: Java, JavaScript, TypeScript, Python, C, C++, Go, Haskell, Elixir
- Technologies: PostgreSQL, MongoDB, React, Git, Docker, AWS, Kubernetes