Dokyung Yang

Baltimore, MD, 21218 | 443-477-8794

dyang40@jhu.edu | Website | Linkedin | Github

EDUCATION

Johns Hopkins University   Baltimore, MD

B.S in Computer Science, Applied Mathematics & Statistics | GPA: 3.82/4.0   Graduation: December 2025

Courses: Data Structures & Algorithms(**TA**), Obj Oriented Software Engineering, DB, Parallel Computing, Networks

Programming Languages: Java, Python, C/C++, Typescript, HTML/CSS, Kotlin, SQL, x86 Assembly, R, MATLAB

Tools / Technologies: Linux, Git, Docker, AWS, Jenkins, JQuery, ElasticSearch, JUnit, PostgreSQL, Postman

EXPERIENCE

BMO Capital Markets - Clearpool Group   New York City, NY

Quantitative Developer Intern   June 2024 - Aug 2024

- Designed and implemented an end-to-end testing framework in Java for the core real-time applications of the trading system, which captures 2-3% of U.S equity market trade volume
- Developed a shared multi-casting message bus to subscribe core trading application instances, and built testing libraries to preload configurations for each app, enabling end-to-end testing of orders in the pipeline of validations, risk checks, and downstream tactic transformation
- Enabled multi-instance testing of the applications, allowing targeted testing of specific app instances within each test, adding flexibility and enhancing the scalability of the framework
- Implemented a configurable, centralized logging pipeline for apps across various regions and partitions with Elasticsearch, Logstash, and Kibana, with 1-5ms end to end latency

Samsung Electronics   Suwon, South Korea

Software Engineer Intern   June 2023 - Aug 2023

- Devised a project to monitor and detect sleep apnea on the Samsung Health App
- Presented the idea to a group of 8 and solidified the project scope based on feedback received
- Implemented a blood oxygen level variance data visualization in Kotlin
- Developed a sleep apnea alert feature based on the variance metric threshold

PROJECTS

TutorHub @Johns Hopkins   Baltimore, MD

Full-stack Developer/Engineering Lead   Feb 2024- May 2024

- Designed and developed TutorHub, a fully-fledged tutoring marketplace for the Hopkins community
- Integrated with S3 bucket for images, implemented direct messaging/group messaging features, and developed an efficient availability matching algorithm for the tutor posts browsing page
- Implemented comments, reviews, bookmarks, user reporting features, visual analytics of these metrics on the user profile page to improve user engagement and learning outcomes
- Technologies: AWS, React/Next.js, Node/Express, MongoDB/Mongoose, Clerk, Cypress, Jest

Chat Server

Software Developer   Mar 2023 - Apr 2023

- Developed a synchronous, real-time CLI chat program with C++ and CS:APP3e functions
- Leveraged multi-threading for concurrency and synchronization mechanisms for thread-safety