

Donovan Singh

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EDUCATION

NATIONAL UNIVERSITY OF SINGAPORE

BCOMP IN COMPUTER SCIENCE
2021 - 2025 | Honours (Distinction)
University Scholars Programme

CHINESE UNIVERSITY OF HONG KONG

Fall Exchange 2023 | Hong Kong SAR

SKILLS

LANGUAGES

Python • Java • Scala • JavaScript
TypeScript • HTML/CSS • SQL

FRAMEWORKS/TOOLS

React • Next.js • Redux
Jest • Tailwind • Node.js
SpringBoot • Django • Flask
MongoDB • PostgreSQL • MinIO
Hadoop • Spark • Hive • Presto
AWS • Kafka • MQTT • Docker
Git • Github • Gitlab • ADO

COURSEWORK

- Data Structures and Algorithms
- Parallel and Distributed Algorithms
- Theory of Computation
- Big Data Systems
- Database Systems
- Operating Systems

LEADERSHIP

VICE DIRECTOR

of University Scholars Club, NUS
• Lead the teams building Cinnabot and Website for NUS college residents.

FACILITATOR

for the Asian Undergraduate Summit
• Lead a team of 6 youth leaders from India, China, Thailand, and Singapore to brainstorm solutions for global problems.

ACTIVITIES

Above & Beyond Computer Science

Selected for intensive data structures and algorithms workshop series with Meta software engineers in Singapore.

EXPERIENCE

OKX | SOFTWARE ENGINEER

July 2025 - Present | Singapore

- **Working in the Growth Product team** to help build a powerful and robust platform for managing affiliates and invitees.
- **Utilized:** Java, Spring Boot, MySQL, Kafka, Redis

STANDARD CHARTERED | SOFTWARE ENGINEERING INTERN

May 2024 - Aug 2024 | Singapore

- Worked in the **Corporate & Investment Banking, E-Commerce** team.
- **Developed, tested and maintained** features on Standard Chartered Markets, an app supporting pricing and trading of cross-asset derivative products.
- **Refactored core backend** services used by **multiple** backend-for-frontend services, **migrating** components from Scala to Java to **enhance scalability**.
- **Enhanced visibility** of additional payments **fee validation** errors for the Rates, Loans & Deposits, and Foreign Exchange booking systems.
- **Utilized:** TypeScript, React, Jest, Java, Scala

SHOPEE | DATA ENGINEERING INTERN

Jan 2024 - Apr 2024 | Singapore

- Worked in the **Marketplace Seller Operations** team.
- **Designed schemas** and **optimised queries** for processing **petabytes** of Shopee traffic data on Seller Education Hub and Seller Missions platforms.
- **Built data pipelines** for processing sellers' metrics data for Preferred Sellers.
- **Utilized:** Python, PrestoSQL, Spark, Hive

HTX | SOFTWARE ENGINEERING INTERN

May 2023 - Aug 2023 | Singapore

- **Developed and maintained** features on AlchemiX and Fire Safety Copilot live Whole Of Govt products, enhancing user experience and **system functionality**.
- **Designed and implemented** a **scalable** method for uploading and storing **large** numbers of files using caching, presigned urls, directories, ensuring **reliability**.
- **Designed and implemented** a **collaborative feature** for assigning, replacing, and approving task allocations between government personnel.
- **Utilized:** TypeScript, React, Redux, Next.js, MongoDB, PostgreSQL, Docker, MinIO, MQTT, AWS (S3, Lambda, RDS etc...)

TINKERTANKER | SOFTWARE ENGINEERING INTERN

May 2022 - Aug 2022 | Singapore

- **Added full-stack features** on a course management portal.
- **Utilized:** React, Django, PostgreSQL, Docker

TEACHING

SOFTWARE ENGINEERING

Summer 2023, Summer 2024

- Taught over 60 students topics on software engineering, provided weekly sprint consultations, and graded software projects.

BIG DATA SYSTEMS

Spring 2025

- Taught over 400 students topics on MapReduce and data partitioning, designed assignments, provided consultations, and graded assignments.