Lee Zhi Hao Bryan

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Education

B.Sc. (Information Systems) | Singapore Management University | Dean's List AY21/22   2021 –2025
• **Courses:** Data Structures & Algorithms (Java), Web Application Development, Mobile Application Development, Enterprise Solution Development, Object Oriented Programming (Java), IT Solution Architecture (AWS)

Skills

Languages: Java, Python, JavaScript, TypeScript, Go, SQL
Frameworks: SpringBoot, Next.js, React.js, D3.js, Firebase, Node.js, Flask, MySQL, PostgreSQL
Tools: AWS, Azure, Docker, Postman, Figma, Git, Jira, Tableau, Redis, Prisma, Kubernetes

Work Experience

OKX | *Backend Software Engineer*   June 2025 – Present
• Refactored and enhanced Java code to streamline **Kafka** message ingestion and delivery for backend service in **Java**
• Integrated chains and tokens in **Java** into OKX Centralised Exchange (CeX) workflow
• Led migration of database and **Java** server-side logic for several chains in OKX Centralised Exchange (CeX)

Switcheo Labs | *Fullstack Software Engineer Intern*   20 Aug 2024 – 6 Dec 2024
• Part of **Carbon Team**, focusing on building the Carbon blockchain in **Go** used throughout the entire company ecosystem
• Engineered several UI and blockchain features, mainly the withdrawal workflow in **TypeScript** for a full stack blockchain built on **Op Stack** for an external client

WSAudiology | *Software Engineer Intern*   13 May 2024 – 13 Aug 2024
• Developed and deployed a **C#** backend microservice with **Docker, Kubernetes, Helm** and **Azure** for use in over **100k** manufacturing hearing aids units in factories worldwide each day
• Engineered UI features in **React.js, TypeScript** and **Redux** which integrated with backend microservices for use by factories worldwide to test manufactured hearing aid units

Shopee | *Data Analyst Intern*   4 Sept 2023 – 13 Dec 2023
• Initiated and led development of a backend service which integrated with Shopee's in-house communications application's bot in **Python** for Shopee's cross-regional internal communication system, automating and improving business process and workflow efficiency by **60%**
• Conducted analysis and forecasting on package revenue, monthly seller trends and projections in **Python** and **SQL**, contributing to **15%** improvement in revenue generation

Focus Digitech – Cybernatics Pte Ltd | *Software Engineer Intern*   8 May 2023 – 4 Aug 2023
• Developed and managed dashboards of SIEM platforms that optimized data visualization and operational efficiency in **React.js** and **TypeScript**, resulting in enhancements to a client's cybersecurity visualization infrastructure by **30%**
• Designed and implemented **NGINX-load balancing** solutions to optimize resource distribution across server clusters, improving handling of incoming traffic by **40%**
• Set up and configured numerous **Linux** virtual machines, implementing networking and security hardening measures for project architectures

Projects

Goldman Sachs Portfolio Analyzer – 1st place | Project Link
• Built a stocks analyzer in **Next.js** utilizing **Java SpringBoot** and **MongoDB (NoSQL)** that provides secure JWT authentication & real-time analysis of stock profiles of different users with different profiles (time-series, P&L analysis)

Ascendas Loyalty Access Logging App | Project Link
• Built an access logging application in **React.js** with microservice architecture, with multiple backend frameworks that provides access control for different user roles
• Fully deployed on **AWS**, utilizing **DynamoDB** (**NoSQL**) for database storage, and optimized query fetching with **Redis** caching

Extra-Curriculars & Achievements

JP Morgan Code For Good 2024 | 1st – runners up
Carro X AWS Hackathon 2022 | Top 10 placing among 120 teams