Bing Yu Yap

+65 8882 0906 | Singapore, SG | bingyu.yap.21@gmail.com
github.com/bingyuyap | linkedin.com/in/bingyuyap | bingyuyap.com

EDUCATION

Bachelors of Science, Computer Science, Singapore Management University — Aug 2020 — May 2024

- Dean's List AY 2020/21, On Track for Magna Cum Laude
- Relevant Coursework: Design and Analysis of Algorithms, Operating Systems, IT Solution Architecture

WORK EXPERIENCE

Dust Labs — Oct 2022 - Present
Software Engineer — *Santa Monica, CA (Remote)*

- Led the white-labeling of the backend into a client-agnostic service, minimizing additional development efforts for new clients. Implemented the **Domain Driven Design** methodology to guarantee code adaptability and maintainability.
- Developed a **Gin** backend server to streamline infrastructure creation for a range of software applications chosen by clients, cutting deployment time by over **12 hours per client**.
- Led the backend development for an NFT explorer, aggregating real-time on-chain data for the y00ts/DeGods collection.
- Enhanced backend service response time by **90%** using **Amazon ElastiCache for Redis**, caching real-time data while preserving data consistency across multiple **Kubernetes pods**.

De Labs — Jun 2022 — Oct 2022
Backend Engineering Lead — *Los Angeles, CA (Remote)*

- Led the backend development for the y00ts NFT scholarship and approval process, streamlining the review and approval of applications for NFT minting. System was used by over **34,000 applicants** and **30 reviewers** during a **2-week period**.
- Designed a bot to tweet scholarship approvals, boosting DeGods market cap by **50MM USD** through promotional efforts.
- Developed the backend for t00bs mint, incorporating the use of token gating and wallet delegation systems.
- Implemented an in-house payment system using **Express.js** to automate **SOL** and **Solana Program Library (SPL)** token transactions. This system facilitated royalties splitting and weekly payslip distribution.

ByteDance/TikTok — Dec 2021 — Aug 2022
Backend Engineering Intern — *Singapore, SG*

- Enhanced batch keyword addition performance by **95%** using **Go concurrency**, increasing keyword capacity from **2,000 to 50,000 words** per import on the sensitive word management platform.
- Boosted export keyword feature performance by **85%**, cutting wait time by **10 minutes per export**.
- Improved the sensitive text approval system to resolve text safety policy conflicts between applications, such as TikTok and Douyin, and regions, like the US and China, boosting process efficiency.
- Developed a suite of microservices for text normalization and detection, handling **5,000 queries per second** and used department-wide to reduce costs and improve scalability.

Solana.FM — Jul 2021 — Nov 2021
Backend Engineering Intern — *Singapore, SG*

- Developed a **.NET**-based hosted service to publish unindexed Solana blocks to **RabbitMQ**, which were then consumed by a **Rust-based block indexer**.
- Further increased the hosted service's efficiency by **3,000 blocks per minute**.
- Optimized block indexer to improve the indexer's efficiency by upgrading from Diesel to pure **Rust** and **Tokio-postgres**.

SKILLS

Programming Languages	Java, C, C++, C#, Go, Rust, Python, JavaScript, TypeScript, SQL
Frameworks	Spring Boot, .NET, KiteX, Gin, Express.js, Ruby on Rails
Technologies	GraphQL, RabbitMQ, MongoDB, MySQL, PostgreSQL, Redis, Git, Jira Docker, Kubernetes, Tilt, AWS (EC2, Fargate, SQS, Lambda), Cloudflare (R2, Workers)