CHEN YONGWEI

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SENIOR SOFTWARE ENGINEER

Software Engineer with 3 years of experience in backend development and scaling complex distributed systems. Proven track record of designing and developing over 30 microservices, ranging from video streaming to content recommendation. Proficient in multiple programming languages and adept at optimizing system infrastructure for high performance and cost savings. Strong expertise in building scalable and efficient solutions to deliver impactful software products.

Work Experience

uWave Singapore

Senior Software Engineer | Go, Kubernetes, GitLab, Flutter, React

Jul 2021 - Present

- Leads the development of over 30 microservices for a lifestyle-sharing community platform with more than 40,000 users.
- Promoted to Technical Co-founder in the start-up to lead and maintain all the backend development and analytics.
- Designed complex features: authorization, video streaming, content personalization, search ranking, chat, notification.
- Developed backend microservices with Go, mobile application with Flutter, and website with React.
- Introduced a generic consistent caching pattern using Go Generics, reducing the source lines of code (SLOC) by 90%.
- Architected the analytics pipeline from inception to implementation, covering ingestion, processing, storing, predicting.
- Achieved rapid development with a lead time of 2-4 weeks per feature while supporting existing microservices.
- Orchestrated code rewrites from Spring Boot to Go in a multiple-phase process without downtime.
- Implemented GitLab CI/CD for seamless code deployment to Kubernetes using Helm Charts.
- Optimized system infrastructure, reducing multimedia storage costs by 90% with zero egress cost.
- Ensured the scalability of microservices to handle up to 10,000 concurrent users with low server cost.
- Maintained Kubernetes infrastructure to support high availability with a 99.9% SLA.
- Mentored and led a team of 4, facilitating rapid Agile iteration and feature development.

uWave Software Engineer | Java, Spring Boot, Go Singapore

Jul 2020 - Jul 2021

- Designed and implemented new backend features using Spring Boot microservices with a lead time of 4 weeks.
- Led the development of major features: Discussion, Discover Friends, Bus Timings, and Badge Rewards.
- Optimized algorithms and data caching patterns in microservices, reducing latency by 80%.
- Architected a predictive bus timings system that progressively optimizes over time with 99% accuracy.

MOH Office for Healthcare Transformation

Singapore

Software Engineer | Swift, iOS, Java, Android

May 2020 - Jul 2020, Dec 2020 - Jun 2021

- Developed the digital phenotyping platform for iOS, allowing the onboarding of iPhone users, scaling up to 10,000 users.
- Simplified onboarding process using QR codes for both iOS and Android mobile devices.

Design Prodigy

Singapore

Software Engineer Intern (Digital Strategy) | Python, Javascript

May 2019 - Aug 2019

- Developed an automated system for campaign configurations and reports generation, reducing manhours by 70%.
- Architected a semantic network to optimize ad campaigns' configurations, lowering cost per conversion by 80%
- Designed and implemented the user interface for website videos using HTML, CSS, and Javascript.

EDUCATION

Nanyang Technological University

Singapore

Bachelor of Engineering (Computer Science) and Bachelor of Business (Business Analytics)

Meridian Junior College

Singapore

GCE 'A' Levels - 6 Distinctions

AWARDS AND ACHIEVEMENTS

2020 - Aon x NTU Data Hackathon: 1st place out of 7 teams, utilising real-life data for customer matching

2019 - Shopee National Data Science Challenge: 1st place out of 360 teams, classifying online listings

2018 - iNTUition v5.0 Hackathon: Best AI Hack, innovating Generative AI solution for audio creativity

2018 - Bambu Fintech Challenge: 1st place, designing and developing web applications for financial planning

SKILLS

Experience: Go, Python, Dart, Javascript

Familiar: Java, Swift, C, R, React, Next.Js, Vue, Flutter, Spring Boot, Tensorflow, Keras, SQL, NoSQL, MongoDB, S3, Dgraph, Redis, Docker, Kubernetes, Google Kubernetes Engine, Microservices