# BIN CHOI

<u>LinkedIn</u> | <u>binchoi.github.io</u> | <u>GitHub</u> | <u>Portfolio</u> Alternative Military Service [산업기능요원 보충역 – 전직]

#### **SKILLS**

- Go | Echo | Python | Django, Flask | MySQL | NoSQL | Docker | Kubernetes | Java | Spring Boot | Scala | Akka | Git
- AWS | Cloud Computing | CI/CD | Unit Testing | gRPC, Protobuf | k6, JMeter | Loki | Datadog, Sentry, PagerDuty
- Microservices | Distributed Systems | Backend | SDK Development | Korean, English Both native proficiency

# **EXPERIENCE**

# **Software Engineer (Server)**

## **BUZZVIL**

2022.07 | Present

- Co-led the Backend development of a new flagship offerwall product E2E, from identifying system requirements and dependencies to software implementation, unit/load testing, configuring monitors and dashboards, deployment, and production troubleshooting. Developed with Python, Go, and AWS cloud computing services (including RDS, DynamoDB, ElastiCache, S3, EKS), the offerwall is projected to drive in \$30 million of revenue in its first year.
- Developed scalable APIs on enterprise-level microservice applications to provide and advance features on BuzzAd SDK (iOS, Android, Web) using Go (Echo) and Python (Django, Flask) that handle billions of daily requests.
- Implemented a data processing pipeline and cron workflows to provide publishers with insightful statistics about their promotions (i.e. non-ad, engagement campaigns) such as bounce rate and engagement rate, using Fluentd, Apache Airflow, Amazon S3, Amazon Athena, and Argo Workflows.
- Optimized the performance and reliability of a critical remote configuration API serving over a billion requests daily by implementing the Probabilistic Early Expiration strategy (xFetch) to prevent cache stampedes, resulting in a 20% reduction of p90 latency from 5ms to 4ms and a 50% decrease in error rate from 0.02% to 0.01%.
- Centralized software metadata and documentation by automating the registration of new microservices to a software catalog platform (Backstage) and presenting guidelines for technical specifications, resulting in a 70% increase in registered services, improved developer onboarding experience, and reduced communication overhead across teams.

#### **EDUCATION**

#### YALE-NUS COLLEGE

**2019 | Present** 

Singapore

- **BSc** (Hons) in Mathematical, Computational, and Statistical Science (conc. in CS)
- Yale-NUS Global Leader Scholar merit-based, full scholarship awarded to only eight students since inception
- Yale-NUS & Duke-NUS Liberal Arts and Medicine Pathway conditional admission to post-graduate MD program
- Relevant Coursework: Quantitative Reasoning, Introduction to Computer Science, Proof, Data Structures and Algorithm, Probability, Parallel, Concurrent, and Distributed Programming, Introduction to Computer Network, Programming for Data Science [GPA: 4.85/5.00]

#### **AALTO UNIVERSITY**

 $\mathbf{2022.01} \mid \mathbf{2022.06}$ 

Helsinki, Finland

- Exchange student to the School of Computer Science
- Completed several master's degree courses in the Computer Science and Management Department
  Relevant Coursework: Software Engineering, Introduction to Artificial Intelligence, Databases, Machine Learning with
- Python, Thinking Tools, Impact and Argumentation, Web Software Development [GPA: 5.00/5.00]

## TECHNICAL EXPERIENCE

- **HabitRacer** (02.2022 ~ 05.2022). An immersive habit tracker that transforms habit building into a thrilling competition between friends and family members over incentivizing wagers. [Portfolio | Code]
- Exploration of Parallel, Concurrent, and Distributive Programming (08.2021 ~ 11. 2021). A guided exploration of Parallel, Concurrent, and Distributive Programming using Scala. [Portfolio | Code]

#### ADDITIONAL EXPERIENCE AND AWARDS

- Yale-NUS Global Leader Scholarship: merit-based full scholarship (\$56,400 / year)
- Presenter at Yale-NUS Summer Research Symposium [Poster]
- TEDx Host (2019)
- Programming for Education and Leadership in Afghanistan (Founder)
- Valedictorian
- TOEIC: 990 / 990, SAT: 1550 / 1600