

# Ikwhan Chang

(Matthew)

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## SUMMARY

Data-focused software engineer with more than six years of experience. Specialized in **large-scale data engineering, analytics, and visualization**. My recent interests are serverless, data engineering, and machine learning.

## EXPERIENCE

### CyberBoss., Inc. San Jose, CA (EduTech)

*Chief Technology Officer & Software Engineer, Jan. 2019 – Sep. 2019*

- Lead and managed an engineering team
- Prototyped all both frontend and backend using Firebase and React for a large scale.
- Designed the zero-configurable VMs for the live online coding, compiling, and testing on GKE.
- Developed multiple serverless like payment server and video conference on GCP CloudRun using Paypal API and WebRTC.

### Urhyme, San Francisco, CA (Big Data/AI)

*Founder & Software Engineer, Jan. 2016 – Dec. 2018*

- Founded a data visualization web service designing the ETLs with multiple healthcare providers to maximize users' daily motivation providing a small sharable chart.
- Developed all RESTful API server on Play! Framework, fault-tolerance database and its asynchronous DAOs using Scala-slick on GCP
- Designed responsive UI modules using Twitter Bootstrap and ReactJS from scratch.
- Designed many serverless for sharing the resources and fault tolerance on the GKE and CloudRun.
- **Stacks:** Docker, GCP (GKE, Cloud SQL, BigQuery, DataFlow, CloudRun), Hadoop, Play! with Scala, React.js, Next.js, Node.js.

### Webcash Inc., Seoul, South Korea (FinTech)

*Software Engineer, Aug. 2010 - Mar. 2012*

- Integrated financial transaction data (credit, debit, stock, ETF, etc.) from top vendors with 5M+ users per company.
- Developed a financial web dashboard to analyze and visualize users' consumption patterns.
- Operated the large-scale online payment for the tuitions from **10+** top Korean universities with **0.3M+** students.
- Developed online payment for **1K+** pharmacists, manufacture, and customers.
- **Stacks:** Spring Framework, JSP, Hibernate, Freemaker, jQuery, JavaScript

### Elancer Co., Ltd. Seoul, South Korea

*Software Engineer, Mar. 2009 – Jul. 2010*

- Developed the large-scale (**10K+ active users per day**) marketplace for freelancer using Spring MVC with velocity and MyBatis
- Renewed the conglomerate company website especially user management and log analytics service using Adobe Flex and ASP.NET

## EDUCATION

**M.S. in Software Management, Carnegie Mellon University, Mountain View, CA** Aug. 2020 - Aug. 2021

**B.S. in Computer Science and Engineering, Chung-Ang University, Seoul, South Korea** Mar. 2012 - Feb. 2015

## PUBLICATIONS & AWARDS

- Co-Author: Jenil T., **Ikwhan Chang**, Younghee P. "Secure Data Management in Internet-of-Things Based on Blockchain," accepted for 2020 IEEE International Conference on Consumer Electronics (ICCE); Las Vegas, NV
- 1<sup>st</sup> Hackaton: **Ikwhan Chang**, Mihyun Kim, "a social map sharing," awarded on 1<sup>st</sup> prize with \$10K, Naver Inc., 2011. Seoul, Korea
- Author: HTML5 and Mobile Web for Full-Stack Programmer", Digital Books Inc., 2013. Seoul, Korea

## SKILLS

- **Languages & DB:** Java, Scala, Python, C++, JavaScript/ES6, JSP, MySQL, MariaDB, Oracle DB, MongoDB, Redis, C/C++
- **Frameworks & Libraries:** ReactJS, Node.js, Express, Spring Boot/MVC, Play!, Slick, Akka, Socket.io, Velocity, MyBatis, Hibernate
- **Cloud & BigData & Etc:** GCP (main), Docker, Kubernetes, Gradle, Maven, SBT, Git, Jenkins, Gitlab CI, Hadoop, Apache Beam, Spark