

# Ikwhan Chang

San Mateo, California

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## SUMMARY

Skilled and business-oriented Software Engineer with more than 5 years of experience specializing in big data product and web development. I'm currently not looking for a full-time Software Engineer role but feel free to contact me if you want to discuss regarding a high-scalable, data-driven organization where strong leadership and collaborative skills will be useful in maximizing development by teamwork.

## EXPERIENCE

### Google LLC, Sunnyvale, CA

*Software Engineer, Oct. 2021 - Present*

### Carnegie Mellon University, Pittsburgh, PA

*Teaching Assistant, Feb. 2021 – May. 2021*

- Worked teaching assistant for **Distributed Machine Learning** course at CMU (Algorithms for Large-scale Distributed ML and Optimization)

### Urhyme, San Francisco, CA (B2C, Big Data, AI)

*Founder, Chief Technology Officer, Jan. 2016 - Dec. 2018*

Founded Urhyme to help bring personal data analytics and visualization to maximize users' self-discipline and resolutions.

- Developed and led product strategy and design; defined data **ETLs**, **DB scheme**, **REST API**. Responsible for all technical and strategic: PM, UX design, **front-end** development, testing, **CI/CD**, **microservices**, and cloud infrastructure using **GCP**, **Kubernetes**, **MERN**, **Play! with Scala**.
- Helped pitch to VCs (e.g., PlugAndPlay) and raised over \$1m in the capital. Secured 3rd providers' partnership (e.g., RescueTime) Managed a Scrum team of up to 5 employees, including engineering and marketing.

### Webcash Inc., Seoul, South Korea (B2B, FinTech)

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

Member of the core web platform team managing financial data, building out the web application, and improving performance and efficiency.

- Built a highly scalable financial service to analyze how the user leverages the financial assets through data visualization using Spring Framework.
- Integrated distributed financial data (credit/debit/stock/ETF) from customers (with **5M+** users per customer) to our internal system.
- Led and improved an existing tuition payment web service and batch with **0.3M+** students decreasing error rate by less than **0.01%**.
- Upgraded and developed an existing medicine payment web service and batch with **10K+** users per transaction, improving speed by **20%**.

### Elancer Co., Ltd. Seoul, South Korea (B2B, e-Commercial)

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

Part of a small team of operating teams for existing web services. Managed 10+ services simultaneously.

- Built the large-scale (**10K+ active users per day**) freelancer job marketplace becoming Korea's **1<sup>st</sup> largest marketplace**. Shaved **20%** off page load time by replacing the mingled code and running expensive calls asynchronously, and caching results using Spring Framework.
- Built a common web framework to build the customer's website, including user management, CMS, and analytics tools.

## SKILLS

**Languages & DB:** Java, Python, JavaScript/ES6, Scala, TypeScript, JSP, MySQL, CloudSQL, BigQuery, MongoDB, Redis

**Frameworks & Libraries:** React, NodeJS, Express, Play Framework, Slick, Akka, Spring Boot/MVC, Velocity, MyBatis, Hibernate, Socket.io

**Cloud & BigData & Etc:** Jupyter Notebook, GCP, Cloud Run, Docker, Kubernetes, Git, Scrum, Jenkins, Gitlab CI, Hadoop, Apache Beam, Spark

## 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 & ACADEMIC PROJECTS

- **Co-Author:** J. T., **Ikwhan Chang**, Y. P. "Secure Data Management in IoT Based on Blockchain," accepted for 2020 ICCE; Las Vegas, NV
- **1<sup>st</sup> Hackaton Winner:** **Ikwhan Chang**, Mihyun Kim, "a social map sharing," awarded 1<sup>st</sup> prize with \$10K, Naver Inc., 2011. Seoul, Korea
- **Certification:** Applied Machine Learning, Columbia University, 2020, New York, NY
- **Latest Academic Project:** A real-time IVR system using Twilio Programmable Voice API and Google speech-to-text for the business owner.
- **Personal Project:** Twitter Trend Analyzer – a tool for data analysis and visualization of Tweets by keyword with Python NLP processing.