

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. Looking for a full-time Software/Data/Machine Learning Engineering role to join a high-scalable, data-driven organization where strong leadership and collaborative skills will be useful in maximizing development by teamwork.

EXPERIENCE

Carnegie Mellon University, Pittsburgh, PA

Teaching Assistant, Feb. 2021 - Present

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

CyberBoss., Inc. San Jose, CA (B2C, EduTech, Blockchain)

Chief Technology Officer & Software Engineer, Jan. 2019 - Sep. 2019

Reporting directly to the CEO, responsible for product planning, development, and support of all applications. Built and led a team of up to 5 employees.

- Implemented new tools and technologies such as CI, CD, distributed system, automated testing that dramatically increased software quality, and stabilized releases to microservices: defined ETLs, data architecture, and cloud infrastructure.
- Chief architect for the distributed cloud system. Bootstrapped online code sandbox with compile, testing, and run using Kubernetes.
- Developed a blockchain-based certification issue system on Ethereum. Supported IEEE DAAPCON (Decentralized Apps and Infra) as volunteer.
- Inherited a team with no discernible work process and instilled Scrum.

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, microservice, and cloud infrastructure using GCP, Kubernetes, MERN, Play! Framework 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 **1st 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

M.S. in Computer Engineering, San Jose State University, San Jose, CA Aug. 2015 - Dec. 2017

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
- 1st Hackaton Winner:** **Ikwhan Chang**, Mihyun Kim, "a social map sharing," awarded 1st 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 business owner.
- Personal Project:** Twitter Trend Analyzer – a tool for data analysis and visualization of Tweets by keyword with Python NLP processing.