

Jun Hyuk Chang

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in [mallang](#)

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EDUCATION

The University of Chicago

Sep. 2022 - May. 2027 (Expected)

Ph.D. in Computer Science

- Database system research in [ChiData group](#). Advisor: [Aaron Elmore](#)

KAIST (Korea Advanced Institute of Science and Technology)

Sep. 2016 - Feb. 2018

M.S. in Computer Science

Early Graduation

KAIST (Korea Advanced Institute of Science and Technology)

Mar. 2013 - Aug. 2016

B.S. in Electrical Engineering

Early Graduation

Cum Laude, GPA in 4.0 scale: Overall(3.74), **Major**(3.82), **Upper**(3.98)

- Double major: Computer Science, Minor: Business and Technology Management

Seoul Science High School (SSHS)

Mar. 2010 - Feb. 2013

WORK EXPERIENCE

ByteDance (TikTok), San Jose, CA, USA

Research Scientist Intern

(15 weeks) Jun. 2025 - Sep. 2025

- Developed serializer/deserializer using Apache Arrow in Spark for OLAP DB.

SK hynix, Gyeonggi, South Korea

Tech Leader (Full time)

(1yr 2mos) Aug. 2021 - Sep. 2022

NAND Data Design Engineer Intern

(3mos) Dec. 2015 - Feb. 2016

- Designed and developed the platform and algorithm working between NAND and FIL layer.
- Designed a semiconductor(NAND) with read-and-write functions, verified through simulation and testing.

TmaxData, Gyeonggi, South Korea

Researcher, Team Leader (served as a military for 3 years) (Full time)

(3yrs 7mos) Feb. 2018 - Aug. 2021

- **Led the team** of 10 people and managed the database's active storage at a core level.
- Designed re-balance and re-sync functions of Database active storage manager, which manages all the tablespace maps and instances. Improved the performance and speed of existing products and solved problems such as memory leaks.
- Developed protocol with the cloud and auto-configured the database with the info from the protocol.

Kiswe Mobile Inc., New Providence, NJ, USA

Software Engineer Intern

(3mos) Jun. 2016 - Aug. 2016

- Developed the real-time interactive advertisement system that interact with user in Kiswe live stream.
- Developed the real-time voting system while live event. The result shows in graph real-time.

SELECTED PUBLICATIONS

- [j.2] Enhancing Transaction Processing through Indirection Skipping
Riki Otaki, **Jun Hyuk Chang**, Goetz Graefe, Aaron J Elmore
VLDB 2025: *Proceedings of the VLDB Endowment* 18 (11), 4104-4116
- [c.2] Resource-Adaptive Query Execution with Paged Memory Management
Riki Otaki, **Jun Hyuk Chang**, Charles Benello, Goetz Graefe, Aaron J Elmore
CIDR 2025: *Conference on Innovative Data Systems Research*
- [c.1] Towards Resource-adaptive Query Execution in Cloud Native Databases
Rui Liu, **Jun Hyuk Chang**, ..., Aaron J Elmore, Michael J Franklin, Sanjay Krishnan
CIDR 2024: *Conference on Innovative Data Systems Research*
- [j.1] Amygdala resting-state functional connectivity alterations in patients with chronic insomnia disorder: correlation with electroencephalography beta power during sleep
Woojin Kweon, ..., **Jun Hyuk Chang**, Yu Jin Lee
Sleep, Volume 46, Issue 10, October 2023, zsad205, <https://doi.org/10.1093/sleep/zsad205>