

Kyungho Byoun

[✉ kyungho.byoun@gmail.com](mailto:kyungho.byoun@gmail.com)

[LinkedIn](https://www.linkedin.com/in/kyungho-byoun) [linkedin.com/in/kyungho-byoun](https://www.linkedin.com/in/kyungho-byoun)

[GitHub](https://github.com/Byunk) github.com/Byunk

Software developer expertise in large scale data engineering. Passionate about building data-driven products from 0 to 1.

EXPERIENCE

Software Developer

SAP Apr 2024 – Present
Seoul, South Korea

- Architected and implemented a petabyte-scale observability microservice aggregating telemetry from **60** global regions and **375** Kubernetes clusters into a unified Delta Lake using Spark and HANA Data Lake Files.
- Designed end-to-end data pipelines serving worldwide teams with 30+ tables and growing, enabling previously impossible analyses such as Major Upgrade Window downtime tracking across pod lifecycle events.
- Built an LLM-powered analytics chatbot with RAG for natural language querying of observability data. Achieved **41.6%** accuracy on complex internal NL-to-SQL benchmarks tailored to business context.

Intern

SAP Jul 2023 – Apr 2024
Seoul, South Korea

- Conducted a PoC using Istio service mesh to enable local-remote cluster integration. Submitted for US patent as the primary contributor.
- Developed a combinational graybox test automation pipeline for HANA DB, identifying **11** bugs in production versions.

Undergraduate Researcher

KAIST Augmented Reality Research Center Jul 2022 – Jun 2023
Daejeon, South Korea

- Designed and implemented a 5-stage sleep estimation algorithm for smart mattress integration using digital signal processing in MATLAB and Python.
- Iterated through testing with 5 participants from Kyung Dong Navien; achieved only **5.61%** difference compared to Galaxy Watch (ECG-based) benchmark.

EDUCATION

Korea Advanced Institute of Science and Technology (KAIST)

Bachelor of Engineering in Computer Science, Aerospace Engineering

Daejeon, South Korea

Mar 2017 – Feb 2024

PROJECTS

Branchy.io

Side Project

Ongoing

- Building an ideation platform that visualizes ideas in graph with LLM-powered understanding and enhancement.

NASA Space Apps Challenge

Honorable Mention

2025

- Developed risk analysis of Korean west/east coast power plants based on SAR dataset.

Google Solution Challenge

Global Top 100, Team Lead

2023

- Developed a real-time scam detection application using BERT and Google Cloud, aimed at protecting socially disadvantaged individuals.

KAIST App Startup Competition

\$5,500 Award, Team Lead

Jul 2022 – Dec 2022

- Proposed solutions and business strategies to address the supply and demand imbalance in the carbon credit market.

Open Source Contributor

Agno, Langchain, SQL Metadata

Lifelong

SKILLS

Professional: Python, Spark, Delta Lake, Kubernetes **Proficient:** React

LANGUAGES

Korean: Native or Bilingual Proficiency **English:** Professional Working Proficiency