

# Kyungho Byoun

✉ [kyungho.byoun@gmail.com](mailto:kyungho.byoun@gmail.com)   [in linkedin.com/in/kyungho-byoun](https://www.linkedin.com/in/kyungho-byoun)   [github.com/Byunk](https://github.com/Byunk)

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

## EXPERIENCE

**Software Developer** Apr 2024 – Present  
*SAP* 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** Jul 2023 – Apr 2024  
*SAP* 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** Jul 2022 – Jun 2023  
*KAIST Augmented Reality Research Center* 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)** Daejeon, South Korea  
*Bachelor of Engineering in Computer Science, Aerospace Engineering* Mar 2017 – Feb 2024

## PROJECTS

**Branchy.io**  Ongoing  
*Side Project*

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

**NASA Space Apps Challenge** 2025  
*Honorable Mention*

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

**Google Solution Challenge** 2023  
*Global Top 100, Team Lead*

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

**KAIST App Startup Competition** Jul 2022 – Dec 2022  
*\$5,500 Award, Team Lead*

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

**Open Source Contributor** Lifelong  
*Agno, Langchain, SQL Metadata*

## SKILLS

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

## LANGUAGES

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