# Ji Hong Min

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## **Education**

## Seoul National University / M.S in Data Science

Mar. 2022 - Expected Feb. 2024

Research area: Data Visualization, Spatio-Temporal Data Analysis and Prediction (PI: Prof. Hyunwoo Park)

Thesis: Visual Analytics for Maritime Traffic Monitoring and Forecasting

Georgia Institute of Technology / B.S in Mechanical Engineering

Aug. 2013 - May 2016

Overall GPA: 3.16/4.0, Major GPA: 3.21/4.0, Early Graduation with Honor

#### **Skills**

**Programming Languages:** Python, C, C++, SQL, JavaScript **Data Visualization:** Matplotlib, Seaborn, HTML, CSS, Flask, Stata

Machine Learning/Deep Learning: Prediction, Clustering, Regression, Classification

Language: Fluent in Korean and English

# **Data Science Projects**

# Data Driven Vessel Trajectory Clustering & Prediction [1]

Jul. 2022 - Nov. 2023

National R&D project of Ministry of Oceans and Fisheries

- Utilized a clustering algorithm with a novel distance metric to extract vessel behavior for Korea maritime environment
- Predicted future path based on LTE-Maritime and Automatic Identification System data with simulation and deep-learning methods
- Provided visualized system to monitor and forecast maritime traffic

# **Latest News Summary Service**

Mar. 2023 - Jun. 2023

Project for Data Science, 2023 Spring Coursework

- Developed a web-based application that retrieves the latest news data daily and provides answers to user queries
- Constructed an end-to-end framework from Large Language Model to User Interface using Flask and MS Azure services

## **Work Experiences**

**POSCO** / Mechanical Engineering Project Manager Plant Engineering Group, POSCO HQ

Aug. 2016 – Jan. 2022 Jan. 2020 – Jan. 2022

• Managed industrial plant projects including Engineering, Procurement, and Construction,

- specializing in utility facilities (worth up to \$40M).
- Conducted feasibility studies and risk management for projects.

Facility Technology Department, Gwangyang Steel Works

Sep. 2017 – Dec. 2019

- Predicted the machine failure with operational data analysis
- Optimized sinter boiler operation with data analysis (worth up to \$2.1M)

**Seoul National University** / Undergraduate Research Assistant *Bio Robotics Lab, Prof. Kyujin Cho* 

May 2015 - Jul. 2015

• Designed control mechanism for the landing position of Dash Robot

## **Publications**

[1] **Min J**, Lee S, Cho D, Baek J, Park H, A Comparative Study of Vessel Trajectory Prediction Error based on AIS and LTE-Maritime Data, J Navig Port Res, 46(6), 576-584, 2022. [Link]