

# 김선중 (SunJoong, Kim)

50, Haedeung-ro, Dobong-gu | 010-2405-7290 | govindah08@gmail.com | <https://govin08.github.io>

## Education

Bachelor of Science in Mathematics, Korea University, Seoul (3.77/4.5)	Aug. 2015
Master of Science in Mathematics, Korea University, Seoul (3.92/4.5)	Feb. 2024

## Graduate School

<b>Stock prediction using LSTM and wavelet</b> · KOSPI 200, binary classification (up/down, accuracy: 0.58)	Jul. – Dec. 2020
<b>Lipschitz constant of deep neural network</b> · Survey paper on stability of AI architectures	Jul. – Oct. 2022
<b>Production of TeX Template for Korea university graduate school</b> · thesis and dissertation template for TeX paper (math included paper)	Dec. 2022 – Feb. 2023

## Data Analytics Experiences

<b>Suggesting SOCAR zone locations</b> · Aiffelthon of MODULABS, data provided by SOCAR	Dec. 2022 – Feb. 2023
<b>Anomaly detection on manufacturing</b> · LSTM classification on imbalanced data (f1 score: 0.87)	Oct. 2022 – Nov. 2023
<b>Recommendation system on 아이들나라</b> · Enhancing model of neural collaborative filtering (recall: 0.2273, NDCG: 0.21)	Nov. 2022 – Dec. 2023

## Working Experiences

<b>UI networks, 교통연구본부, 대리</b> · Development and distribution of signal generation and traffic assignment algorithms in Seongnam ITS(intelligent transport system) - signal generation: simultaneous signal via signal DB - traffic assignment: align traffic volume using linear programming	Sep 2023 – Sep 2024
<b>IBEDU, math teacher</b> · Teaching mathematics online 20+ students	Dec 2021 – Jan. 2022
<b>private math teacher</b> · Teaching mathematics offline 50+ students	Mar. 2014 – Dec. 2018

## Programming and Maths

<b>data processing</b>	· numpy	· pandas	· scikit-learn
<b>data visualization</b>	· matplotlib	· seaborn	
<b>machine learning</b>	· tensorflow	· pytorch	· keras
<b>code management</b>	· git	· VS code	
<b>math documentation</b>	· TeX	· LaTeX	· github blog
<b>math tool</b>	· geogebra	· (mathematica)	· (matlab)
<b>mathematics</b>	· calculus	· analysis	· linear algebra
	· probability	· abstract algebra	· set theory

## Others

ADsP (Advanced Data Analytics Semi-Professional)

Nov. 2022

TEPS (346)

Feb. 2019