

# JEONGYOON LEE

(631) 615-9165 | IL (open to relocate) | <https://jeongyoon-l.github.io>  
Jeongyoonlee2024@u.northwestern.edu | lee.jenny.cs@gmail.com

## EDUCATION

**Northwestern University Evanston, IL** *M.S in Artificial Intelligence* **Dec 2024 (Expected)**  
Foundations of Reliable Machine Learning, Data Science Seminar, Introduction to AI, Frameworks for Artificial Intelligence

**Stony Brook University Stony Brook, NY** *B.S in Computer Science; Applied Mathematics and Statistics* **Dec 2022**  
GPA 3.73/4.0 | Magna Cum Laude  
Machine Learning, Natural Language Processing, Applied Linear Algebra, Finite Mathematical Structures, Software Engineering

## SKILLS

**Computer Languages:** Python, SQL, Excel | **Libraries:** PyTorch, TensorFlow, Pandas, Scikit-learn, Keras, Numpy, Matplotlib

## EXPERIENCE

**Samsung Electronics, America** | Ridgefield Park, NJ  
SCM Data Analyst in SCP(Supply Chain Planning) Team **April 2023 - July 2023**

- Analyzed and reported the Samsung Home Appliance logistic order progress every day using **Excel** and **ERP systems** to achieve the **forecasted order targets** at the end of the month.
- Calculated the most efficient container allocation for each washing machine model based on the week's Best Buy order quantity, while considering the past weeks' actual orders using a customized Excel formula.
- Created an unshipped report every week to understand how many orders that have PO(Purchase order) have not shipped yet and figure out the reason for the **increase/decrease rate** of unshipped orders.
- Developed automatic GR/GI program for direct shipment management in **Python**, reducing the time for **preprocessing** data manually.

**Akai Kaeru LLC** | Stony Brook, NY  
Data Scientist Summer Intern **June 2022 - August 2022**

- Collaborated in the development of AK Analyst software and performed **Alpha Testing**, identifying and documenting multiple software bugs to enhance **user experience** and **ensure software integrity**.
- Conducted end-to-end data pipeline project, using dataset sourced from the **Spotify API**, including **audio metadata collecting, preprocessing, cleaning, analyzing, and visualizing**. Leveraged insights; determined factors that increase song popularity and drove business outcome.
- Presented technical findings in a clear and concise manner to both technical and non-technical audiences, including senior leadership and stakeholders.

## PROJECTS

**Amazon Product Predictor | PyTorch** **May 2022**

- Established the **Amazon score predictor model** using 200,000 English Amazon review text data with 61% accuracy.
- Utilized **HuggingFace's transformers** with pre trained DistilBERT uncased model to make **predictions**.
- Gained knowledge of fine-tuning deep learning models, data collecting, using pretrained models.

**Covid Infection Prevalence Rate Predictor | MYSQL, TensorFlow, Python, Microsoft Access** **July 2020**

- Built a database with ER Diagram, logical, and physical model using **MySQL** and **Microsoft Access** to set foreign keys and unique keys to the new table from **ERD** which satisfied **DBMS normalization (1NF, 2NF, 3NF, BCNF, and 4NF)**.
- Extracted 3518 COVID patient data, 7279 tracing places from confirmed patient cases and hospital information from the Korean Government dataset, selected features with correlation analysis, and formed a table to use for deep learning.
- Constructed and tuned **Deep Neural Network** to predict patients' **vulnerability** to COVID-19 prevalence infection with high accuracy.

**Improvement of Economic Performance Indicators using Big Mac Index | Python** **Dec 2018**

- Analyzed between current Big Mac Index and economic trends using **correlation analysis** with **Python**.
- Improved current Big Mac Index combined with other economic indices(Living Index and Local Purchasing Power Index), utilized insights from **PCA analysis** to create a new formula for Big Mac Index.

## ACTIVITIES & LEADERSHIP

**Group Leader, Vocalist, THUMB, Seoul (2019)**

- Performed monthly group meetings to make cover songs with various genres, designed the busking in Seoul.

**University Global Ambassador (2017 - 2019)**

- Worked as Vice President under the international office at Ajou University to help exchange students from various countries adjust in Korean culture and held international events.

## AWARDS & CERTIFICATES

**Award in Industrial Engineering contest, KIIE(Korean Institute of Industrial Engineers) (2017)**

- Presented an **effective detachable subway system** and suggested a new subway line based on traffic congestion rate.
- Using Arena Simulation and calculating congestion rate with a penalty multiplier, decreased 82.1% congestion rate by selecting a detachable subway and lowered the effects of **congestion pricing** by \$101.34 billion.