

(812) 272-3128
Bloomington, IN
jongwon@likelion.org

Jongwon Lee

Data Scientist

Blog: Jongwon.net
github.com/jongwonlee
linkedin.com/in/jongwonjohnlee

SKILLS

- **Data Science:** Python, ML - Tensorflow, Decision Tree, Random Forest, KNN, Lasso, Ridge, SVM, Regression Tree, XGBoost, Catboost, LGBM, SHAP, SMOTE, SQL, **NLP** - NLTK, KoNLPy, Sentiment and Stance Detection, **Computer Vision** - OpenCV, CNN, **Data Visualization** - D3, Plotly, Seaborn, Paraview, Tableau, **Network Science** - Gephi, NetworkX, Neo4j, Cytoscape
- **Web/App/Server Dev:** Full Stack, Ruby on Rails, JavaScript, Redis, Java, Swift, AWS, Heroku, Search Engine, Postgres
- **Game Dev:** Unity, C# | **Others:** Git, R, LaTeX, Arduino, EV3, MIS, English, Korean, Chinese

PROJECTS AND RESEARCH

- Property Sales Analysis and Prediction** AUG 2022 — DEC 2022
- ML-based residential property prices prediction investigating housing properties. Leveraged Google Places, Melissa, Niche.com, Stats Indiana Data. Best model: XGBoost, MAPE 11.53% - **Linear Regression, SVM, XGBoost, Catboost, LGBM, SHAP**
- Social Media Community Identification and Analysis** AUG 2022 — DEC 2022
- Leveraged data from Twitter and explored community detection libraries and tools such as **Gephi, NetworkX, Neo4j, Cytoscape**.
- Study Buddy Robot - Human Robot Interaction** AUG 2022 — DEC 2022
- Led designing, building, and researching an **Arduino**-based interactive study buddy robot implementing Pomodoro technique.
- 3D Customer Segmentation Visualization with Paraview** AUG 2021 — DEC 2021
- Performed feature exploration with 3D visualization using Kaggle customer segmentation data.
- Evaluating Textual Features and Oversampling for Automatic Stance Detection** AUG 2021 — DEC 2021
- Performed Natural Language Processing analysis on Twitter to research stance and sentiment. - **NLTK/SVM/SMOTE**
- Systems Analysis and Design for CHRISTEL HOUSE INTERNATIONAL** JAN 2022 — MAY 2022
- Proposed Data Collection Plan, KPI Management, Cost Benefit Analysis, and Implementation Plan for the client.
- Oliver Winery Information Systems Research** AUG 2021 — DEC 2021
- Identified issues and conducted Management Information Systems (MIS) approach to optimize operations for the client.

WORK EXPERIENCE

- Lead Software Engineer | Sungkyunkwan University | University Bus Tracking App | Seoul, Korea** NOV 2017 — MAR 2019
- Conducted market research and developed a campus bus tracking app which resulted in 60%+ student population downloads.
 - Managed project budget and resources. **AWS, Ruby on Rails, Java, Swift**
- Data Scientist Intern | Smilegate | Game Platform Business | Pangyo, Korea** JUN 2017 — AUG 2017
- Conducted NLP analysis on social media data to promote the Gaming Platform called Stove.
 - Continued research involving a collection of social media data, keyword extraction, and web visualization won an AWS award.
- Lead Software Engineer | Likelion | Course Evaluation and Search | Seoul, Korea** OCT 2016 — MAR 2017
- Performed market research, planning, back-end development, server and database management using **Ruby on Rails** and **AWS**.
- Military Police Investigator Sergeant | KATUSA - Yongsan US Army Garrison | Seoul, Korea** MAY 2014 — FEB 2016
- Criminal Investigation Command - Simultaneous interpretation during field investigation and translation of legal documents.
 - Directorate of Emergency Services - Interviewed and screened visitors accessing the military post and escort visitors.

EDUCATION

- M.S. in Data Science, Indiana University, Bloomington, IN** 3.94 GPA DEC 2022
- B.A. in Economics, Minor in Informatics, Indiana University, Bloomington, IN** MAY 2020
- B.A. in Global Economics, Sungkyunkwan University, Seoul, Korea / Full Scholarship by Samsung Electronics Co. Ltd.** MAY 2020

AWARDS

- Omnisian.com | AWS Power User Best 3 | Amazon Web Service Korea** AUG 2017
- Indie-Film Genie - Audience Prediction | Grand Prize | Sungkyunkwan University** DEC 2016
- Nabla Puzzle Game with Unity | Smilegate Game Jam Best 3 | Smilegate** OCT 2016
- Tost.com - English Academy Search Web Service | Likelion Hackathon 5th Place | Likelion** SEP 2016
- Analysis on the Effect of Legal Cap on Phone Subsidies | Grand Prize | Sungkyunkwan University** AUG 2016
- Forest Fire Early Detection and Suppression Tower with EV3 | Grand Prize, Patent | Sungkyunkwan University** AUG 2016
- Undergraduate Full Scholarship | Samsung Electronics, Co. Ltd** MAR 2013