

Interest & Skills

- Area of Interest**
- Data Science • Data Modeling • Machine Learning • Network Analysis • Named Entity Recognition
 - Data Engineering • Natural Language Processing • Information Extraction • Data Visualization
- Technical Skills**
- Python (scikit-learn, numpy, pandas, tensorflow, keras, Flask, altair ...) • R (tidyverse, ggplot, glm)
 - Git • Tableau • SQL • NoSQL • Google Cloud API • HTML • Markdown • LaTeX

Education

MSc in Data Science Sep. 2019 - (Expected) July 2020
University of British Columbia, Vancouver, Canada

- **GPA:** 3.41/4.0
- **Coursework:** Advanced Machine Learning, Statistical Inference II, Supervised Learning, Spatial and Temporal Models, Regression II, Feature & Model Selection, Database & Data Retrieval

BSc in Technology Management, Minor in Applied Statistics Mar. 2013 - Aug. 2019
Yonsei University, Seoul, South Korea

- **GPA:** 3.78/4.3
- **Cousework:** Stochastic Processes for Data Science, Statistical Data Analysis, Statistical Methods, Mathematical Statistics, Smart Service System, Management of Information Systems, Tech-Art Capstone, Social Innovation Capstone, Undergraduate Directed Research
- **Awards:** Honor Award (2018-1, 2017-2), Merit-based Libertas Scholarship (2018-1, 2017-2)

Work Experience

Intern Developer Apr. 2019 - May. 2019
Crevasse AI, Seoul, South Korea

(A.I. Startup for developing and researching on data preprocessing for machine learning and individual recommendation for music and image selection)

- **Role:** Responsible for developing python modules of InfoGAN project and tested out StyleGAN to find the best parameter

Data Science Intern Consultant - Insurance Underwriting Automation Project Jan. 2019 - Feb. 2019
Deloitte Korea, Seoul, South Korea

- **Role:** Performed EDA with sample client dataset using Apache Hive Hadoop, developed Python & R modules for text preprocessing, created user dictionary for noun extraction and POS tagging, fitted and tested various models in cross validation and reported outcomes.

Research Intern of prof. Keeheon Lee Dec. 2016 - Apr. 2018
Human Artificial Intelligence Lab, Yonsei University, Incheon, South Korea

- **Role:**
 - (1) Analysis on News Abusing with Trending Keywords
Collected and scraped news data using trending keywords in Korea in Sep. 2016 and created various data tables for analysis including text similarity computation and time interval calculation between articles.
 - (2) Optimization Problem of Institutional Influence for Intelligent Administration
(Presented at 2018 Fall Annual Joint Conference Korea sponsored by (KIEE, KSS, KORMS))
Collected law data, optimized influence maximization problem conducting propagation tests using independent cascade model with Python.
 - (3) Technology-Society Interaction Data Science: Generative Adversarial Scenario Model for Strategic Planning
(Project Funded by National Research Foundation of Korea)
Collected metadata (USPTO patent data), parsed XML with Python and created RESTful API for the patent data.

Project Experience

NLP to help save lives and protect property (E-Comm 9-1-1)

May. 2020 - Present

- **Description:** Information Extraction from Standard Operating Procedures Document
- **Role:** Provide a reproducible pipeline to process SOP documents into entities and relationships for easy access.
Create a report on the state of SOPs alignment and recommendations for consolidating police and fire operating procedures

Cocktail Recommendation System (Personal)

Oct. 2019 - Present

- **Description:** Cocktail Recommendation System based on ingredient and recipe data
- **Role:** Collected cocktail recipe data, processed text data for metric unification, wrote a thorough documentation.
Currently devising an embedding method

Yonsei TAD Capstone Project (Tech-Art Capstone, Yonsei University)

Sep. 2018 - Dec. 2018

- **Description:** Recommendation system platform COSMOS (Cosmetic Online Service) to advise lipstick with colour similarity
- **Role:** Collected lipstick data and hex color code from various cosmetic websites, created web application using Python Flask.

Yonsei Chatbot Development Competition (Underwood International College Office, Yonsei University)

May. 2018 - June. 2018

- **Description:** FAQ Chatbot for Departmental use
- **Role:** Created web application using KakaoTalk RESTful API, connected Database, hosted with pythonanywhere

Yonsei Social Innovation Capstone Project (Social Innovation Capstone 2, Yonsei University)

Sep. 2017 - Dec. 2017

- **Description:** Public chair reservation and filtering system: PPUCHA
- **Role:** Responsible for all technical development. Created integrated system with raspberry pi, postgres database, pressure sensor and developed web application for service introduction. Developed Chatbot using KakaoTalk RESTful API and a barcode generator with user message input from the Chatbot.

Extracurricular Experience

NwHacks 2020 Hackathon, Vancouver, UBC

Jan. 2020

- **Details:** Participated in NwHacks Hackathon. Developed user authentication system using MS Azure mysql database for logging into our team's web service application

Study Leader/ Project Leader

Oct. 2017 - June. 2019

Yonsei ISSU (Information System Sig. of Undergraduate) Member

- **Details:** Taught basic Python to fellow students and led IT Co-op projects with various companies (Coupang, Playwings, Triple)

Student Attendee

Oct. 2017

The 5th AIEA-NBER Conference, Hong Kong

- **Details:** Attended Entrepreneurial Science Conference hosted by AIEA and NBER

Auxiliary Police

Oct. 2014 - June. 2016

Korea Coast Guard, South Korea

- **Details:** Discharged as a sergeant from KCG Police, serving the country for two years

Volunteer

Jul. 2013 - Aug. 2013

World Friends ICT Volunteer (KIV), National Information Agency (NIA), South Korea

- **Details:** Educated elementary students and teachers with MS Office Tools, basic computer operation and exchanged cultures at Dela-paz West Elementary School in Laguna Philippines