"Learn by Experience"

Education

Seoul National University Seoul, S.Korea

M.S. STUDENT IN ARTIFICIAL INTELLIGENCE

Mar. 2022 -

· Data Mining Laboratory under the supervision of Prof. U Kang

Kwangwoon University Seoul, S.Korea

B.S. IN INFORMATION CONVERGENCE, MAJOR IN DATA SCIENCE

Mar. 2018 - Feb. 2022

Total GPA of 4.07 / 4.5, Major GPA of 4.16 / 4.5 (Credits taken: 137/133)

Publication

INTERNATIONAL

2023 **PLOS ONE**, Sooyeon Shim, Doyeon Kim, Jun-gi Jang, and U Kang Fast and Accurate Interpretation of Workload Classification Model

SCIE

DOMESTIC

2021 **KCC2021,** Hi-Seoung Ahn, Joo-Hyun Moon, Do-Yeon Kim, Jin-Ah Kim, Yu-jin Lee. *A study on User Usage Patterns using OTT Web Service Log Data*

KIISE

Internships

Undergraduate Research Korea University

Fusion Data Analytics and Artificial Intelligence (FDAI) LAB under the supervision of Prof. SungWon Han

Sep. 2021 - Nov. 2021

Project Experience

Recommendation system for accurate project-freelance matching

Data Mining Laboratory

TEAM MEMBER

- Represent project/freelancer embedding using feature information rather than past matching records
- Develop a model that learns by combining the BPR loss values that passed lightGCN for each matching type

Design of plan data collection/structure and development of plan recommender system

Data Mining Laboratory

Apr.2023 - Dec.2023

TEAM MEMBER

Dec.2022 - Apr.2023

- Joint project with Samsung Electronics
- Propose a data structure and (BPR-MF, RNN-based) recommendation algorithm for a plan recommendation system, and demonstrate the effectiveness of the technology through performance verification on virtual and real data

Interpretation model for DRAM workload classification

Data Mining Laboratory

Теам Мемвек

July.2022 - Dec.2022

- Joint project with Samsung Electronics
- Extract interpretable features from workloads in DRAM and train a linear model for interpretation of the black-box workload classification model

 YouTube subtitles and comments analysis.

YouTube subtitles and comments analysis

Kwangwoon University

March.2021 - June.2021

TEAM LEADER, PRESENTER

• Term project for course 'Text and Opinion Mining' of 2021-Spring semester

• LDA Topic modeling the subtitles of videos and categorizing the comments based on the topics, identify preferred topics by sentiment analysis, proceed Text Summarization with TextRank Algorithm

University-industry Cooperation (NHN KCP)

Kwangwoon University

TEAM MEMBER

Sep.2020 - May.2021

- · Made OTT website using python django and javascript and collected web log data in database and analyzed users' usage pattern
- · Dynamic menu structure was designed using a route prediction method based on user similarity and a recommendation system
- Submitted short paper at KCC2021 as a co-author

Fake News Detections Algorithms project (Hosted by NH Investment & Securities)

Seoul, S.Korea

Oct.2020 - Jan.2021

- · Advanced to the final in 'NH Investment & Securities Big Data Competition'
- · Analyzed(EDA) given news data, processed and transformed text data, studied and applied AutoML, built deep learning model for classification (Logistic Regression, RNN, CNN, etc.)
- · Studied Transformer model reading paper "Attention is All You Need (NIPS 2017)", applied pre-trained Bert model

Review-based product information platform start-up project

Seoul, S.Korea

Теам Мемвек

Aug.2020 - Nov.2020

- Won the 1st prize(\$3000) in 'K-STARTUP 2020 STUDENT LEAGUE mock crowdfunding' and the 1st prize(\$3000) in 'KVP 4th Demo day'
- Studied Natural Language Processing (NLP) algorithms
- · Performed sentiment analysis with laptops and food reviews, measured similarity between words to produce keywords synonym table, and predicted keyword scores by review and product

2020 Open Source Contributon

Seoul, S.Korea

CONTRIBUTOR, COLLABORATOR

Aug.2020 - Sep.2020

- Won the Special Prize(\$300) in '2020 Open Source Contributon' and presented at the 'Datayanolja 2020' conference
- Performed speech recognition using Tensorflow Lite, made an IOS app with the pre-trained specific sound detection model
- Reviewed Korean-English translation of our mentor's book <TinyML> and contributed to the open source by posting use cases on GitHub (https://github.com/yunho0130/tensorflow-lite)

Awards & Honors

AWARDS

2021	Dean's List , for Academic Excellence	Kwangwoon Univ.
		Korea
2020	1st Place, K-STARTUP 2020 STUDENT LEAGUE mock crowdfunding	Enterpreneurship
		Foundation
2020	1st Place , KVP 4th Demo day	Kyunghee Univ.
2020	Dean's List, for Academic Excellence	Kwangwoon Univ.
2020	Special Prize, 2020 Open Source Contributon	Ministry of Science
		and ICT

Honors

2021	Semester High Honors , awarded to students with high achievements throughout the semester	Kwangwoon Univ.
2021	Software Excellence Scholarships, awarded to students with excellence in software	Kwangwoon Univ.
2019	English Excellence Scholarships, awarded to students with excellence in English	Kwangwoon Univ.
2018	Admission Scholarships, awarded to freshmen with excellence in admission score	Kwangwoon Univ.

Teaching

SamSung Electronics Data Scientist Education (10th, 11th)

Seoul National University

TEACHING ASSISTANT(TA)

Mar. - Apr., Aug. - Sep. 2023

Data Structure

Seoul National University

TEACHING ASSISTANT(TA) FOR M1522.000900

Mar 2023 - June 2023

Extracurricular Activity

Algorithm Study Group

Kwangwoon University, Seoul

GROUP MEMBER

Feb. 2021 - June. 2021

- · Read the same book about the algorithm that is important and frequently used
- Prepared Coding Test for IT companies using sites Baekjoon Online Judge and Programmers
- Made Team's Github Repository and uploaded our own code and reviewed each other's code

Smart Factory Systems and Data Management Process

Jeonju

- · Participated off-line one-week course by Innovation Center for Engineering Eduation of Jeonbuk National University
- Practiced building virtual smart factory using Festo CIROS and MES4 programs
- · Analyzed and visualized field data using Power BI and made prediction model using Azure

Tampere University, Finland

EXCHANGE STUDENT Aug. 2019 - Dec. 2019

- Took 4 Major courses and one elective class
- Joined Welcome Fair, Welcome Sauna, Campus Scavenger Hunt, School Union Trip

International Students Mentoring Program

Kwangwoon University, Seoul

Mar. 2019 - July. 2019

MENTOR

• Mentoring about school life, including the use of on-campus facilities

• Mentoring about Seoul life, including how to use public transportation, institution facilities, and opening bank accounts

Korean Red Cross Youth (RCY) Volunteer Club

Seoul

Мемвек Маг. 2016 - Dec. 2018

• Volunteering work at a nursing home and abandoned dog shelter and cleaned school and village

Skills_

Programming Python, R, C, Java, MySQL, Android, Swift

Deep Learning Pytorch, Keras, Tensorflow

Data Analysis Numpy, Pandas, scikit-learn, Matplotlib, Tableau

Language Proficiency

Fluent in English, Native in Korean

• 2021.07 - TEPS 369

• 2021.07 - TOEIC 945

• 2020.02 - OPIC IH