Minseong Bae | Curriculum Vitae

Education

Busan Science High School

Busan, South Korea

2018-2020

Korea University

Seoul, South Korea

College of Informatics, Dept. of Computer Science & Engineering

2021-Current

o Double Major: Dept. of Mathematics

 \circ GPA: 4.50/4.50 (for 4 semesters)

Interests

Computer Science

- Machine Learning / Deep Learning
 - : Graph Neural Networks, Safe AI (Adversarial Attack / Defense), Generative Models
- Programming Language
- Problem Solving

Mathematics

- Mathematics for ML/DL/Computer Science
- o Algebra, Discrete Mathematics & Graph Theory, Number Theory

Projects

Epitope prediction in allergens using PPI prediction model

2019

2022

- o Data Preprocessing with Stanford SNAP Yeast PPI data
- o Modeling based on scikit-learn, Tensorflow, Keras
- o Awarded 2019 R&E Academic Presentation Contest
- o Awarded 14th KSCY Excellent Youth Scholars Award in Computer Engineering Session

Prediciton of Successful Shooting and Connectivity Index of Team Network in Basketball

- o Predicting whether shooting is successful or not with NBA shooting data using machine learning techniques
- o Visualization of team network and devising connectivity index of team with NBA game pass data

Awards

2018 I&D Academic Presentation Award - 3rd 2018 o Development of Remotely Operated Underwater Robot of Collaborative Robot for Ship Salvage 2019 R&E Academic Presentation Award - 3rd 2019 o Epitope prediction in allergens using PPI prediction model 14th KSCY Excellent Youth Scholars Award 2019 • In Computer Engineering Session • Epitope prediction in allergens using PPI prediction model 36th Seoul National University Data Mining Camp - 2nd 2019 5th Super Computing Youth Camp by KISTI & UNIST - 2nd 2019

Dean's Award

President's Award

2021 Fall, 2022 Spring, 2022 Fall

Courseworks

Computer Science

- o Data Structure (2021-2)
- **Algorithms** (2021-2)
- Artificial Intelligence (2022-1)
- Theory of Computation (2022-1)
- o Discrete Mathematics (2022-1)
- o **Logic Design** (2022-1)
- o Programming Language (2022-2)
- Information Security (2022-2)
- o Computer Architecture (2022-2)
- o Deep Learning (2022-2)
- Machine Learning (2022-2)

Mathematics

- o Calculus I (2022-1)
- o Number Theory (2022-1)
- o Set Theory (2022-2)

Skills

- o Programming Languages: Python, C, C++, OCaml
- o Frameworks & Tools: Tensorflow, Keras, scikit-learn, (basic) PyTorch
- o Languages: Native in Korean, Conversational in English

Extracurricular Activities

Leader for Korea University Computer Science Academy

2021 Sep-Current

- Various Studies and Projects about Computer Science
- Working as Instructor for Linear Algebra / Probability & Statistics studies

Co-Founder of AIKU; AI in KU

2022 Sep-Current

- ${\color{blue}\circ}$ AI academic society for Korea University undergraudate students
- o Participating in NLP team and working as administrator

Undergraduate Intern in MLV Lab of Prof. Hyunwoo J. Kim

2022 Jul-Current

- o Undergraduate Intern for Korea University MLV Lab (https://www.hyunwoojkim.com/)
- o Studying Graph Neural Networks, Machine Learning

Completed Yonsei University-Naver Cloud Data Science Education Course

2021

- o Basic ML Algorithms: Linear Regression, Decision Tree, Logistic Regression, Random Forest, SVM
- o Artificial Neural Networks & Deep Learning(CNN, RNN, Q-learning), Text Mining & NLP