Suyeong Park

suyeong.park0@gmail.com — github.com/euphoria0-0

RESEARCH INTEREST

My Research interests are mainly on making more **Trustworthy AI** using collaborations of information in data and knowledge from human-beings. I mainly focused on estimating uncertainty on Bayesian approach, especially 'what information we need between **representativity and uncertainty** for better ML model'. Currently, I believe 'understanding an intrinsic attributes of things using our knowledge' is crucial for deploying ML models for better human-being life in a real-world. Thus, I'm currently interested in identifying **CAUSALITY** of things from our data for explainable AI while overcoming the limitations of typical ML.

EDUCATION

Ulsan National Institute of Science and Technology (UNIST)   Ulsan, Korea
Master of Science in Artificial Intelligence   *Aug. 2020 – Aug. 2022*
    GPA: 4.15/4.3
    Advisor: Prof. Kwang In Kim and Prof. Namhoon Lee
    Thesis: Active Client Selection for Communication-efficient Federated Learning [Link]
    Relevant Coursework: Causal Learning & Explainable AI, Reinforcement Learning, Advanced Machine Learning Topics

University of Seoul   Seoul, Korea
Bachelor of Science in Statistics and Data Science   *Mar. 2015 – Feb 2020*
    GPA: 3.7/4.5
    Relevant Coursework: Bayesian Statistics, Machine Learning, Deep Learning, Time Series Analysis, Multivariate Statistics, Statistical Computing, Linear Algebra, Probability Theory, Mathematical Statistics

EXPERIENCE

Visiting Researcher   Jul. 2022 - Aug. 2022
CausalML Lab, Purdue University (supervised by Prof. Dr. Murat Kocaoglu)   *West Lafayette, USA*
- Research Project: Bayesian Causal Discovery

Research Assistant   Aug. 2020 – Aug. 2022
Machine Learning and Vision Lab, UNIST (supervised by Prof. Dr. Kwang In Kim)   *Ulsan, Korea*
- Research Projects: active learning, transfer learning, federated learning, image attribute estimation

Intern, Data Analyst and Engineer   Mar. 2020 - Jun. 2020
Seoul Big Data Campus   *Seoul, Korea*
- Projects: Citizen Movement and Consumption Behaviour analysis around Seoul city

Intern, Data Analyst Assistant   Sep. 2019 - Feb. 2020
FSC (Financial Services Commission)   *Seoul, Korea*
- Projects: Data analysis using financial public data

PUBLICATION

S. Park, Y. Ahn, K. Kim. **Blind** (keyword: Deep Active Learning, Bayesian) [Preprint]   *In Submission*, 2022
S. Park, Active Client Selection for Communication-efficient Federated Learning [Link]   *Master's Thesis*, 2022

PROJECTS

Visual Common Sense Through Self-supervised Learning for Restoration of Invisible Parts in Image   April 2021 – Present
- Image Attribute Recognition

Causal Learning with Artificial Intelligence   Mar. 2021 – Dec. 2021
- Causal Discovery with genome data

Citizen Movement and Consumption Behaviour analysis around Seoul city   Apr. 2020 – Jun. 2020
- Data analysis with card consumption, moving population data by Seoul city region

Financial data analysis using financial public data   Jan. 2020 – Feb. 2020
- Data analysis with financial public dataset in Financial government

Technical Skills

Languages: Python, R, SQL (MySQL)
Frameworks: PyTorch, TensorFlow, Scipy, Matplotlib
Developer Tools: Git, Docker, PyCharm, VSCode
Others: QGIS, Tableau, SAS

Talks and Teaching

Guest Talk

CSE362 Artificial Intelligence, Department of CSE, UNIST   Nov. 2021
Introduction to Federated Learning (for undergraduate students)

Teaching Assistant

AI519 Advanced Machine Learning Topics, AI Graduate School, UNIST   Fall. 2021

Extra-curricular Experience

Exchange Student   Jun. 2018 - Aug. 2018
Universidad San Ignacio De Loyola   *Cusco, Peru*
- Coursework: Spanish, Photograph

Exchange Student   Aug. 2017 - Feb. 2018
The Hague University of Applied Sciences   *The Hague, Netherlands*
- Coursework: User Experience Design, Design Programming