

Curriculum Vitae

Jungmin Seo

서정민



CONTACT

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- [LinkedIn](#)
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- [GrowthHackers](#)(Business Data Professionals of SNU)

EDUCATION

Seoul National University(SNU)

- **Undergraduate (Mar 2020 ~)**
 - **Major:** Electrical and Computer Engineering
 - **Minor:** Statistics

PROJECTS

[In Progress]

Generative AI Course (24-2)

- Currently engaged in a project focused on generating music composed of specific combinations of instruments, following the establishment of a detailed research plan.

DABLE (Industry-Academia Collaboration Project) - Product Manager(PM)

- **Analyzing Ad-Fatigue phenomena**
 - At an Ad-Tech company, Dable, I am identifying the causes of time-dependent decreases in ad CTR within ad bidding models through data analysis.
- **Designing an exploration algorithm that incorporates uncertainty of predicted CTR**
 - By leveraging prior research in Bayesian deep learning models and reinforcement learning, I am devising an exploration algorithm aimed at maximizing corporate revenue while reducing CTR prediction uncertainty.

[Completed Projects]

NEWNEEK (Industry-Academia Collaboration Project)

- **Developed an article recommendation system for use on a newsletter platform**
 - Benchmarked the model structure of NAVER's recommendation system (AiRS) to extract article recommendation groups.
 - Performed article topic modeling using LDA to make embedding vectors of each users, designed rule-based logic to address the cold start problem, and developed algorithms to prevent filter bubbles and re-rank recommended articles as an integrated modular components.
 - Evaluated the performance of the recommendation system through online A/B testing.

COXWAVE (Industry-Academia Collaboration Project)

- **Developed a RAG-based recommendation system using knowledge graph**
 - Extracted user dialogue data into a knowledge graph and developed a RAG-based recommendation model that considers the attributes of each item in a predefined list of recommendation candidates.
 - Utilized Neo4j and LangChain.

Personal Project

- **Noisy Label Classification**

- For the final project in a machine learning course, I developed an attention-based sequence model that reorders input data sequences using correctly ordered text labels when presented with image sequences in incorrect order.
- Intrigued by the issue of noisy label classification, I designed a robust training model structure by co-teaching two models to solve a Kaggle contest problem hosted by professor Jonghyun Choi(SNU Machine Perception and Reasoning Laboratory)
- Can see the code in github

ADDITIONAL PROJECTS AND EXPERIENCE

- **Adaptive Illuminance Control System Project**

- Undertook a final project in Basic Circuit Theory and Experiment course
- Encompassed the entire process from PCB design to board assembly for an adaptive illuminance control system.

- **Statistical Validation of ESG Management Survey Data**

- Demonstrated the statistical validity and reliability of results obtained from survey datasets used to assess corporate ESG management practices.
- Utilized factor analysis(Direct Oblimin).

- **Participated in an Internal Competition within the College of Engineering at SNU**

- As a member of Sigma Intelligence, the robotics club of SNU ECE, developed police and fugitive robots using Arduino.
- Designed an efficient multi-robot tracking system.

SKILLS

- **Python Data Science Libraries**

- Pytorch, Numpy, Pandas, Sklearn, ...

- **Familiar to algorithm theories and development with code**

- Graph Theory
- **Advanced in mathematics for engineering**
 - Vector Calculus
 - Linear Algebra
 - Probability Theory
 - Mathematical Statistics
 - Signal Processing and Control Engineering
- **Highly interested in traditional ML theories and neural network structures mentioned below:**
 - Generative AI
 - Reinforcement Learning
 - Bayesian Deep Learning
 - Graph Neural Networks
- **Proficient in Fusion 360 (CAD) for 3D Modeling**
 - Skilled in creating necessary objects using Fusion 360 (CAD) software.