

EDUCATION

Korea University M.S. in Computer Science	Seoul, KR 2022–Current
Sogang University B.S. in Convergence Software, Triple major in Business Administration & Mass Communication	Seoul, KR 2011–2018

WORK EXPERIENCE

NLP Engineer, Visually-rich Document Understanding Cognitive AI Group, SAMSUNG SDS	Seoul, KR Nov 2021–Current
NLP Engineer, Conversation model development In-house venture “XEEDLAB”, SAMSUNG SDS	Seoul, KR Mar 2021–Oct 2021
Data Scientist, Text mining in Manufacturing Intelligent Factory, SAMSUNG SDS	Seoul, KR Jul 2018–Feb 2021
Data Scientist, Extracurricular activities recommendation Headstart	San Jose, CA Summer 2017

PROJECTS

Multi-turn conversation model development Construct Korean dialogue dataset and implemented BlenderBot <ul style="list-style-type: none">• Research on comparing seq2seq models and decoder-only models for conditional generation• Dataset construction with lower cost using machine translation	Mar 2021–Oct 2021
Equipment troubleshooting guidance system (Samsung Display) Designed and implemented NLP pipeline for recommendation system <ul style="list-style-type: none">• Sentence relation prediction using Sentence BERT• Contextualized classification using Hierarchical Attention Network	Oct 2019–Feb 2021
Manufacturing document management system (Samsung Electronics) Developed search engine to manage engineering log and extract topic map from document <ul style="list-style-type: none">• Data ETL and ElasticSearch add-on development• Extractive summarization, topic extraction and similar documents search	Jul 2018–Sep 2019

RESEARCH EXPERIENCE

Co-Researcher, Natural Language Processing Lab, Korea University <ul style="list-style-type: none">• Implemented BlenderBot for Korean Dialogues with Prof. Heuiseok Lim	Seoul, KR Mar 2021–Oct 2021
Research Intern, Kangbuk Samsung Hospital <ul style="list-style-type: none">• Applied cycle GAN variant models for medical image translation	Seoul, KR Summer 2018

Research Assistant, Sogang University

- Analyzed student activity data and designed an extracurricular activities roadmap

Seoul, KR

2015–2018

RESEARCH INTERESTS

Deep learning based NLP

- Dialogue System
- Visual Document Understanding
- Information Retrieval

PUBLICATIONS

- [1] Hodong Lee, Jongmin Lee, Yoonna Jang, Jaehyung Seo, Heuseok Lim, “Study on Multi-turn Response Generation with Information Retrieval and Korean Generative Model”, *Korea Convergence Society (KCS)*, 2021, (Under Review).

SKILLS

- **Samsung Software Competency Test** (‘Professional’ level)
- **Deep Learning model development** (Pytorch & Tensorflow/Keras)
- **Design of NLP dataset and service pipeline**
- **Building of RESTful microservices** (Django & FastApi)
- **EDA & Data visualization** (Python & R)
- **Proficient in SQL, Elasticsearch, JAVA**

TEACHING

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|---|-------------|
| • Teaching Assistant at Keras Korea | Winter 2019 |
| <i>Prepared and taught materials in NLP pipeline development using TensorFlow/Keras</i> | |
| • Teaching Assistant at Sogang University | 2016–2018 |
| <i>Course Name (Computational Thinking)</i> | |

REFERENCES

Prof. Heuseok Lim

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