Namu Park

152, Yeonheero 41-gil, Seodaemun-gu, Seoul, Republic of Korea, 03648
Cell: +82-(0)10-9755-8772
Webpage: namupark.github.io
Email: namupark@yonsei.ac.kr

Research Interests

- **Machine Learning**: Artificial Intelligence, Representation Learning (Triplet Network), Unsupervised learning
- **Natural Language Processing**: NLP for Clinical Informatics (Electronic Health Records), Distributed Representation, Machine Translation
- **Data Science**: Social Text Mining, Information Retrieval, Data Analysis for Health Care

Education

Yonsei University, Seoul, South Korea (GPA: 4.22/4.30)

- M.S. in Digital Analytics (2020), advised by Professor Min Song

Sogang University, Seoul, South Korea (GPA: 3.65/4.30, Triple major, $Magna\ Cum\ Laude$)

- B.S. in Convergence Software (2019)
- B.E. in Economics (2019)
- B.A. in French Language and Culture (2019)

Courses related to Research Interest:

Computer Science (Undergraduate)	Data Science (Graduate)	Math / Statistics / Analytics
- Data Structures	- Machine Learning	- Linear Algebra
- Python	- Database Management	- College Mathematics
- JAVA	- Computer Programming	- Economic Statistics
- C Language	- Data Mining	- Econometrics
- Operating Systems	- Text Mining	- Mathematical Economics
- Algorithms	- Artificial Intelligence and Deep Learning	- Statistical Analysis of Big Data
- Database Systems	- Advanced Machine Learning	- Big Data Parallel Processing
- Capstone Design	- Natural Language Processing and Deep Learning	- Practical Big Data Analytics

Research/Teaching Experience

Asan Medical Center **September 2020 – Present**

- Researcher (advised by Professor Chang-Min Choi, *Department of Pulmonology and Critical Care Medicine, Asan Medical Center*)
- Analysis of Electronic Health Records related to lung cancer
- Developing machine learning / neural network models for the facilitation of EHR usage

Soft Computing Laboratory, Yonsei University **August 2019 – March 2020**

- Research Assistant (advised by Professor Sung-Bae Cho, *Department of Computer Science, Yonse Universityi*)
- "Deep Learning-based Gear Noise Classification" with *Hyundai Mobis* (*Hyundai Motor Group*)
- "Poisonous Clause Detection using Word Embedding and Sentence Similarity" with *Samsung Engineering* (*Samsung*)"
- "Rule-based Semantic Graph Analysis using Chat Log" with *Electronics and Telecommunication Research Institute, Republic of Korea*

Digital Analytics, Yonsei University **March 2019 – August 2020**

- "Information Extraction from Unstructured Medical Text using Pseudo-label-based Semi-supervised Learning" with *Asan Medical Center*
- "Consensus Analysis of Drug Repurposing Literatures for COVID-19" co-work with Professor Ying Ding, *School of Information, University of Texas, Austin*
- "Automatic Translation of Affiliations and Author Names in Research Papers using Attention and Long-Short Term Memory" with *Yonsei College of Medicine*
- "Violent Language Detection through Unstructured Big Data Analysis"
- "Text-mining based Consumer Analysis on Foldable Phones focusing on Galaxy Fold"
- "Sentimental Analysis of Cyber Campus data, focused on Group Assignment" with *Teaching and Learning Innovation Center, Yonsei University*
- "A Curation System for Academic Papers using Paper2vec and BERT embeddings"

Big Data X Campus **June 2018 – August 2018**

- Summer school, supported by *Government of the Republic of Korea*
- "Deep Learning-based Bloodless Disease prediction"
- "Improving Leisure/Culture via Shopping Complex Analysis"

Teaching Experience

- Database Management Teacher Assistant (2019 1st semester)
- Python tutorial on deep learning using Tensorflow, Keras (*Korea Industrial Technology Association*)
- SQL (Structured Query Language) tutorial session (Special lecture, *Yonsei University*)
- Introduction to Database Management theory (Special lecture, *Yonsei University*)

Publications

- **Are we there yet? Analyzing scientific research related to COVID-19 drug repurposing.** Namu Park, Hyeyoung Ryu, Ying Ding, Qi Yu, Yi Bu, Qi Wang, Jeremy J. Yang, Min Song. *Scientometrics* (submitted)
- **Classifying Impact Noise in Car Steering Gear using Mel-spectrogram based Convolutional-recurrent Neural Network.** Namu Park, Seok-Jun Bu, Sung-Bae Cho. *Korea Software Congress*, 2019.
- **A Monte Carlo Search-based Triplet Sampling Method for Learning Disentangled Representation of Impulsive Noise on Steering Gear.** Seok-Jun Bu, Namu Park, Gue-Hwan Nam, Jae-Yong Seo, Sung-Bae Cho. *International Conference on Acoustics Speech and Signal Processing*, 2020. (Virtual Presentation Speaker)
- **Data Augmentation using Empirical Mode Decomposition on Neural Networks to Classify Impact Noise in Vehicle.** Gue-Hwan Nam, Seok-Jun Bu, Namu Park, Jae-Yong Seo, Hyeon-Cheol Jo, Won-Tae Jeong. *International Conference on Acoustics Speech and Signal Processing, 2020*.

Skills and Certificates

Language

- English (Fluent), French (Fluent, DALF C2), Korean (Native)

Computing Skills

- Python programming (expert), C programming (intermediate), Java (intermediate)
- Tensorflow, Keras (expert)
- SQL (Structured Query Language) using MariaDB, Oracle SQL
- Big Data Analytics (Hadoop/Spark), Data Visualization
- Google Firebase, Android Studio, Django

Certificates

- Samsung Convergence Software Course certificate
- Big Data X Campus certificate

Scholarship

- Yonsei Digital Analytics Teacher Assistant Scholarship (2019, 2020)
- Higher Education Innovation Team Social Innovation Activity Scholarship (2019)
- Samsung Convergence Software Course Scholarship - **Academic Excellence** (2018)
- Sogang Honors Scholarship - **Academic Excellence** (2017)
- Government Funding Scholarship (2016)
- Sogang SALANG Scholarship (2013, 2016, 2017, 2018)

Other Information

- Member of Sogang University Basketball Team
- Language Learning Course in Lyon Catholic University, France
- Served as Tourist Police for 21 months (Military Service)
- Lived 2 years in Montreal, Canada (2004 – 2006), 2 years in Paris, France (1997-1999)