Joel Jang

https://wkddydpf.github.io/

EDUCATION

Korea University — Seoul, Korea
Bachelor of Computer Science and Engineering — March 2017 – February 2021

Korea Advanced Institute of Science and Technology (KAIST) — Seoul, Korea
Graduate School of AI, KAIST | L&K Lab | Advisor : Minjoon Seo — March 2021 – Present

PUBLICATIONS

Joel Jang, Yoonjeon Kim, Kyoungho Choi, Sungho Suh* (2020), Sequential Targeting: a continual learning approach for data imbalance in text classification. Expert Systems with Applications (2021): 115067 [paper] [code]
Sungho Suh, **Joel Jang**, Seungjae Won, Mayank S. Jha, Yong Oh Lee* (2020), Supervised Health Stage Prediction Using Convolution Neural Networks for Bearing Wear. Sensors, 20(20), 5846. [paper] [code]
Yong Oh Lee*, **Joel Jang**, Sungho Suh (2020), Diagnosis of bearing wear state and prediction of remaining useful lifetime using nested scatter plot. PHM KOREA 2020. *(oral presentation)* [paper] [code]

RESEARCH EXPERIENCES

Language & Knowledge Lab | Graduate School of AI, KAIST — Seoul, Korea
Graduate Research Assistant — *March 2021 – Present*
Working on Large Language Models as Knowledge Bases

Natural Language Processing & Artificial Intelligence Lab | Korea University — Seoul, Korea
Undergraduate Research Intern — *March 2020 – July 2020*
Basic NLP Research including Machine Reading Comprehension, Open-Domain Question and Answering, Natural Questions, and Language Models. Placed 4th place in AI NLP Challenge Enliple Cup (fine-tuning large models).

Blockchain Security Research Center | Korea University — Seoul, Korea
Undergraduate Research Intern — *March 2019 – June 2019*
Basic research foundations of blockchain technology and potential security vulnerabilities

Artificial Intelligence Research Lab | Korea University — Seoul, Korea
Undergraduate- Research Intern — *December 2018 – February 2019*
Implemented multiple-GPU parallel model training algorithm (Features Replay Algorithm) using CUDA programming

INTERNSHIPS

Kakao Brain — Seongnam-si, Korea
Wintern Intern — *December 2020 – March 2021*
Implement SOTA semi-supervised method on long-tailed super large-scaled image dataset with pseudo-labels

NAVER CORP. | Media Tech Group — Seongnam-si, Korea
Summer Intern — *July 2020 – September 2020*
Improving current hate speech comment detection model (AI Clean Bot 2.0)
Developed novel incremental learning method to solve the data imbalance problem (*paper published under Expert Systems with Application*)
Implementing SOTA research on multitask learning, semi-supervised learning, and online learning on real application

Korea Institute of Science and Technology European Research Centre — Saarbrucken, Germany
Research Intern / Smart Convergence Group — *August 2019 – January 2020*

Implemented deep learning models for motor fault diagnosis and prognosis
Developed early fault detection model using convolution neural networks and data wrangling method (*paper published under Sensors)*
Gave an Oral Presentation in *PHM Korea 2020 (2020. 07. 23)*

AWARDS & SCHOLARSHIPS

Best Innovation Award, Intel AI Drone Hackathon, 2018
Future Global Leader Scholarships, Korea University, 2019
Korea Student Aid Foundation, Samsung Scholarship, 2019
Promising Start-up Team Award, K-Startup Grand Challenge, 2019
3rd place, HAAFOR Challenge 2019
4th place, AI NLP Challenge Enliple Cup, 2020
Grand Prize (First place) in Graduation Capstone Design Competition 2020, Best paper award

TECHNICAL STRENGTHS

Programming Languages	Python
Programming Libraries	Tensorflow, Pytorch, Huggingface, Pytorch-Lightning, Wandb

LANGUAGES & CERTIFICATES

Bilingual in English (*native, 12 years living in US, 2004-2016*) and Korean (*native)*
GRE: 326 (Verbal, 157/170, 76th Percentile) | Quant, 169/170, 95th Percentile | AW, 5.0/6.0, 92nd Percentile)
TOEFL: 119/120 (Reading, 30 | Listening, 30 | Speaking, 29 | Writing, 30)
SAT: 1530/1600 (Reading and Writing, 730 | Math, 800)
Conversational in Chinese