

Joel Jang

<https://wkddydpf.github.io/>

EDUCATION

Korea University
Bachelor of Computer Science and Engineering
GPA: 3.75/4.5 (91.4/100) / Major GPA: 4.03/4.5

Seoul, Korea
March 2017 – Present (*February 2021*)

PUBLICATIONS

Joel Jang, Yoonjeon Kim, Kyoungcho Choi, Sungho Suh* (2020), Sequential Targeting: An Incremental Learning Approach for Data Imbalance in Text Classification. *Submitted to Expert Systems with Applications. (under review), Best Paper in Graduation Capstone Design Competition.* [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

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
Winter Intern December 2020 – March 2021
Implement SOTA semi-supervised method for more than 40M+ images with data imbalance

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 under review*)
Implementing SOTA research on multitask learning, semi-supervised learning, and online learning on real application

Korea Institute of Science and Technology European Research Centre Saarbrücken, 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
Programming Libraries

Python, Java, Html, CSS, Javascript, React, Linux
Tensorflow, Pytorch, Pandas, Sklearn, CUDA, Spark, Hadoop

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

REFERENCES

Yong Oh Lee

Principal Researcher, Group Leader
Smart Convergence Group
Korea Institute of Science and Technology
European Research Centre

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Heui Seok Lim

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