Joel Jang

https://wkddydpf.github.io/

EDUCATION

Korea University Seoul, Korea

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

March 2017 – Present (February 2021)

PUBLICATIONS

<u>Joel Jang</u>, Yoonjeon Kim, Kyoungho Choi, Sungho Suh* (2020), Sequential Targeting: An Incremental Learning Approach for Data Imbalance in Text Classification. *Submitted to Expert Systems with Applications. (under review)* [paper]

Yong Oh Lee*, <u>Joel Jang</u>, 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]

Sungho Suh, <u>Joel Jang</u>, 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]

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

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

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

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

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Smart Convergence Group
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Korea Institute of Science and Technology Email: yongoh.lee@kist-europe.de

European Research Centre https://www.kist-europe.de

Heui Seok Lim

Professor, Director of Human-Inspired AI & Comp. Center (http://hiai.kr)
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Korea <u>http://nlp.korea.ac.kr/</u>