# Joel Jang

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## EDUCATION

Korea University — Seoul, Korea
Bachelor of Computer Science and Engineering — March 2017 – Present (*February 2021*)
GPA: 3.75/4.5 (91.4/100) / Major GPA: 4.03/4.5

## RESEARCH/WORK EXPERIENCE

**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

**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 NLP Competition.

**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

**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
*Winter Research Intern* — *December 2018 – February 2019*
Implemented multiple-GPU parallel model training algorithm (Features Replay Algorithm) using CUDA programming

## PUBLICATIONS

**Joel Jang**, Yoonjeon Kim, Kyoungho Choi, Sungho Suh, Sequential Targeting: An Incremental Learning Approach for Data Imbalance in Text Classification. *Submitted to Expert Systems with Applications. (under review)*
Yong Oh Lee, **Joel Jang**, Sungho Suh, Diagnosis of bearing wear state and prediction of remaining useful lifetime using nested scatter plot. PHM KOREA 2020. *(short paper)*
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.

## AWARDS AND SCHOLARSHIPS AND CERTIFICATES

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

## CERTIFICATES

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)

## TECHNICAL STRENGTHS

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|---|---|
| Programming Languages | Python, Java, Html, CSS, Javascript, React, Linux |
| Programming Libraries | Tensorflow, Pytorch, Pandas, Sklearn, CUDA, Spark, Hadoop |

## LANGUAGES

Bilingual in English (*native, 12 years living in US, 2004-2016*) and Korean (*native)*
Conversational in Chinese

## REFERENCES

Dr. Yong Oh Lee
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Smart Convergence Group, Korea Institute of Science and Technology
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