Byung-hyun Kim

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Department of Computer Science, Hanyang University, Seoul 04763, South Korea

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EDUCATION

Master of Science:

Hanyang University, Seoul, South Korea (Mar. 2021 – Feb. 2023)
- Major in Computer Science.
- Advisor: Prof. In-whee Joe.
- 3.75/4.50 GPA.

Bachelor of Science:

Seokyeong University, Seoul, South Korea (Mar. 2014 – Feb. 2020)
- Major in Computer Engineering.
- 3.94/4.50 GPA.

RESEARCH INTERESTS

Machine Learning, Deep learning, Computer vision, Natural language processing.

PUBLICATIONS

1. Byunghyun Kim, Jongwha Chong, et al. "CNN-based Ensemble Model for Epileptic Seizure Detection," IEIE Summer Conference, July 1, 2021.
2. Byunghyun Kim, Inwhee Joe, et al. "A CNN-Attention Model for Epileptic Seizure Detection," IEEE Student Paper Contest, IEEE Seoul Section, pp. 35-37, November 12, 2021.
3. Byunghyun Kim, Dohyun Lee, Kyeongyuk Min, Jongwha Chong, Inwhee Joe, "Global Convolutional Neural Networks with Self-Attention for Fisheye Image Rectification," IEEE Access (SCI-E, IF=3.367), Vol. 10, pp. 129580-129587, December 12, 2022.

HONORS & AWARDS

1. Best Paper Award – Summer Annual Conference of IKEEE 2021.
2. Student Paper Award - IEEE Seoul Section Student Paper Contest 2021.

WORK EXPERIENCE

Mar. 2021 - present

Graduate Research Assistant
- Mobile Network & AI Lab.
- Working with Prof. In-whee Joe.
- Working on research in deep learning.

Mar. 2018 − Feb. 2020

Undergraduate Research Intern
- Programming Language Lab.
- Worked with Prof. Yang-sun Lee.
- Worked on smart contract security.

ADDITIONAL INFORMATION

Mar. 2021 - present

Computer Vision Project
- Image Classification.
- Object Detection.
- Image Generation.
- Super-Resolution.
- Image Restoration.
- Image Denoising.
- Self-Supervised Learning.

Natural Language Processing Project
- Question Answering.
- Machine Translation.
- Text Classification.
- Text Generation.

Kaggle Competitions (As of February 21, 2023)
- PSNR prediction for image quality assessment. **Top 8%** (6th of 82)
- Hotel booking demand. **Top 18%** (41th of 237)
- Store Sales - Time Series Forecasting. **Top 9%** (50th of 597)
- Natural Language Processing with Disaster Tweets. **Top 13%** (106th of 886)

Blog
- Sharing knowledge about programming, artificial intelligence, and etc.

SKILLS AND CERTIFICATIONS

- Language: C/C++, Java, Python.
- Framework: TensorFlow, Pytorch, Springboot.
- Certification: Engineer Information Processing.

QUALIFICATIONS

TOEIC (Sep. 2022)

- Listening 380 / Reading 320 // Total 700.

PATENTS

Sentiment analysis by incorporating domain sentiment lexicon and word embedding.

- Applicant: Byunghyun Kim, Inwhee Joe.
- Application number: 10-2022-0066186.