Hyungtak Lee

21leeht@gmail.com

Interests

Machine Learning, Deep Learning, Reinforcement Learning, Artificial Intelligence

Education

Kwangwoon University Mar 2017 - Feb 2023
Undergraduate Student Seoul, Korea

- Bachelor of Science, School of Computer and Information Engineering
- GPA: 4.29/4.5, Dean's List for 3 semesters
- Won award in senior project: "GAN based Fire Data Augmentation Model."
- Leave of absence for military service: Mar 2020 - Feb 2022 (2 years)

Publications

Hyungtak Lee, Seongju Kang, and Kwangsue Chung. "Robust Data Augmentation Generative Adversarial Network for Object Detection" Sensors, Dec 2022 (SCIE, IF: 3.847) [pdf]

Hyungtak Lee, Seongju Kang, and Kwangsue Chung. "Object Detection with Dataset Augmentation for Fire Images Based on GAN" 13th International Conference on Information and Communication Technology Convergence (ICTC), Oct 2022 [pdf]

Hyungtak Lee, Seongju Kang, Jaegi Hwang, and Kwangsue Chung. "Object Detection Dataset Generation Framework using GAN" Korea Computer Congress (KCC), Jun 2022 [pdf]

Chi-Hyun Ahn, Hyungtak Lee, and Kwangsue Chung. "IoT Collaboration System Based on Edge Computing for Smart Livestock System" Journal of the Korea Institute of Information and Communication Engineering (JKIICE), Feb 2022 [pdf]

Patent

Generative Adversarial Networks for Fire Data Augmentation, Patent Application No: 10-2022-0172089, Korea, 2022. 11.

Research Experience

Computer Communication Lab Jul. 2021 -
Undergraduate Research Assistant Kwangwoon University, Korea

- Participated in government-sponsored research projects under the guidance of Prof. Kwangsue Chung
- Participated in project on generative modeling and data augmentation
- Participated in project on development of lightweight object detection framework for edge devices

Teaching

Computer Networks Fall 2022
Teaching Assistant

- Covered basic computer networks and major internet protocols
- Evaluated course assignments on weekly basis

Data Communications Spring 2022
Teaching Assistant

- Covered basic data communications, communication protocols, transport media, multiplexing, encoding, and error control
- Evaluated course assignments on weekly basis

Work Experience

Military Service Dec. 2019 - Jul. 2021
Korean Augmentation To the United States Army 1TTSB, 8th U.S. Army

- Won Army Commendation Medal (ARCOM) and Coin of Excellence from 311th Signal Command at Hawaii.

Skills

Languages: C, C++, Rust, Python, ARM Assembly, Scheme
Frameworks: Pytorch, Tensorflow, CUDA
Applications: Git, LaTeX

References

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