GEUNHYEOK YU

Ph.D. Student

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Yongin-si, Republic of Korea

SUMMARY

Talented student with industrious and systematic approach to learning information. Open and clear worker with disciplined execution and methodical nature. Extensive knowledge of research and software skills.

RESEARCH INTERESTS

- Computer Vision
- · Artificial Intelligence
- · Representation Learning
- · Model Compression

EDUCATION

Mar. 2024 – Present Kyung Hee University, Republic of Korea

Yongin-si, Korea

Ph.D. course in Department of Software Convergence

Artificial Intelligence and Robotics Lab. supervised by Prof. Hyoseok Hwang

Mar. 2024 -Feb. 2022 Kyung Hee University, Republic of Korea

Yongin-si, Korea

M.S. course in Department of Software Convergence

Artificial Intelligence and Robotics Lab. supervised by Prof. Hyoseok Hwang

Mar. 2018 -Feb. 2022 **Gachon University, Republic of Korea** B.S. course in Department of Software

Seongnam-si, Korea

EXPERIENCE -

Feb. 2022 -Present

Ph.D./M.S. Student Researcher

AIRLab, Kyung Hee University

- "Decision-BADGE: Decision-based Adversarial Batch Attack with Directional Gradient Estimation"
- "Real-Time Automated Solubility Screening Method Using Deep Neural Networks with Handcrafted Features"
- "Generative Perturbation Network for Universal Adversarial Attacks on Brain-Computer Interfaces"
- "A2XP: Towards Private Domain Generalization"

PyTorch / Deep Learning / Probabilistics / Linear Algebra

Jul. 2020 -

Aug. 2020

Internship Student

DDS, Seoul, Korea

CAD Development Team3D Mode Visualization

C++ / VTK / Linear Algebra / Geometry

PROJECTS

Mar. 2022 -Jul. 2022

Development of solubility measurement technology using computer vision

(주) 디스메카, SAIT Corp.

Hubidity Detection, Machine Learning, Computer Vision

PUBLICATIONS

INTERNATIONAL JOURNAL

Nov. 2023

Generative Perturbation Network for Universal Adversarial Attacks on Brain-Computer Interfaces

IEEE Journal of Biomedical and Health Informatics, Volume: 27, Issue: 11, 2023, [IF:7.76]

Jiyoung Jung, HeeJoon Moon, Geunhyeok Yu, Hyoseok Hwang

Index Term – Adversarial attack, brain computer interfaces, EEG classification, universal adversarial perturbation

Jun. 2023

Real-Time Automated Solubility Screening Method Using Deep Neural Networks with Handcrafted Features

MDPI Sensors 2023 23(12) [IF:3.847]

Minwoo Jeon, Geunhyeok Yu, Hyundo Choi, Gahee Kim, Hyoseok Hwang

Keywords – Solubility measurement, automated solubility screening, handcrafted feature, deep neural networks, support vector machine

INTERNATIONAL CONFERENCE

Jun. 2024

A2XP: Towards Private Domain Generalization

IEEE/CVF CVPR, 2024

Geunhyeok Yu, Hyoseok Hwang

Software

- OpenCV
- PyTorchGit

Research

- · Scientific Methodology
- Analytic Thinking
- Teamwork and Collaboration

LANGUAGES

English

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Korean

native