

YEONGTAK OH

Ph.D Candidate

Email: oyt9306@gmail.com

PERSONAL INFORMATION

Birth: Republic of Korea

Dec 19th 1996

Nationality : Korean

Language : First Language Korean, Fluent in English

Military Service Status : Discharged

EDUCATION

Seoul National University

Sep 2022 - Current

Department of Electrical and Electronics Engineering

Ph.D Candidate

Advisor : Prof. Sungroh Yoon

Seoul National University

Sep 2018 - Aug 2020

Master of Mechanical Engineering

Advisor : Prof. Byeng D. Youn

Thesis : Motion-Adaptive Few-Shot Fault Detection Method of Industrial Robot Gearboxes via Residual Convolutional Neural Network

Seoul National University

Mar 2014 - Aug 2018

Bachelor of Mechanical and Aerospace Engineering

Advisor : Prof. Byeng D. Youn

Thesis : Wave Localization and Energy Harvesting Using a Defect Mode of Elastic Metamaterials in Low Frequency Range

Chungnam Science High School

Mar 2012 - Feb 2014

RESEARCH INTERESTS

2D/3D Generative Models, Test-Time Adaptation, Multi-Modal Agent

INTERNATIONAL JOURNAL

1. **Y Oh,** S Lee, U Hwang, S Yoon, On Mitigating Stability-Plasticity Dilemma in CLIP-guided Image Morphing via Geodesic Distillation Loss .

International Journal of Computer Vision (IF: 11.6), Nov 2024

2. **Y Oh,** Y Kim, K Na, B D Youn, A Deep Transferable Motion-Adaptive Fault Detection Method for Industrial Robots Using a Residual Convolutional Neural Network.

ISA Transactions (IF: 5.468), Nov 2021

3. S Khalid, W Lim, H Kim, **Y Oh,** B Youn, H Kim, Y Bae, Intelligent Steam Power Plant Boiler Waterwall Tube Leakage Detection via Machine Learning-Based Optimal Sensor Selection.

Sensors (IF: 3.576), Nov 2020

DOMESTIC JOURNAL

1. B D Youn, H Kim, J Ko, J Park, H Kong, **Y Oh**, Domain knowledge-based data preprocessing technology for industrial applications of deep learning, *The Korean Society of Mechanical Engineers(KSME)*, Vol.59(8), p.34-38

INTERNATIONAL CONFERENCE

1. **Y Oh***, J Choi*, Y Kim, M Park, C Shin, S Yoon, ControlDreamer: Blending Geometry and Style in Text-to-3D *BMVC, 2024, poster*
2. **Y Oh***, J Lee*, J Choi, D Jung, U Hwang, S Yoon, Efficient Diffusion-Driven Corruption Editor for Test-Time Adaptation *ECCV, 2024, poster*
3. **Y Oh**, J Kim, System Design and Implementation of Multi-legged Spider Robots for Landmine Detection in the Demilitarized Zone *UR, 2021, oral*
4. **Y Oh**, Y Kim, K Na, B D Youn, A Novel Fault Detection Method of Industrial Robots Using Motor Current Signals via Convolutional Neural Network *IMCR, 2019, oral*

EXPERIENCE

- Research Intern** *Jan 2022- Aug 2022*
Seoul National University, Data Science and Artificial Intelligence Lab
Continual Learning
Advisor : Prof. Sungroh Yoon
- Military Service** *Aug 2020- Jan 2022*
Location: Korea Military Academy, AI R&D Center
Position: Military Science and Technology Researcher, Republic of Korea Army

AWARDS AND HONORS

- Best Poster Awards:** KSPHM, Domestic Conference *2019 Fall*
Best Paper Awards: ICMR, International Conference *2019 Fall*
Best Project Awards: Advanced Composite Material based on Seashell Structures *2017 Fall*

TEACHING ASSISTANT

- Machine Learning Fundamentals and Applications**, Seoul National University *2024 Spring*
Solid Mechanics, Seoul National University *2020 Spring*

SKILLS

- Programming Languages** Python(Pytorch, Tensorflow), MATLAB
Languages English

SCHOLARSHIPS

- Seoul National University Alumni Association Scholarship** *2017 Fall - Aug 2020*

TALKS

- ControlDreamer and Beyond: Post-Training Multi-View Generative Models for 3D Generation
NVIDIA, Feb 2025