

# JAESOON BAIK

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## RESEARCH INTERESTS

## Primary research interests

Active learning/Long-tailed Learning/Learning with Noisy Labels

## Additional research interests and experiences

Interpretable model/Semi-supervised learning/Class incremental learning, Multi-modal representation learning

#### **EDUCATION**

Hanyang University | Ph.D. candidate

Sep. 2019 – Present

Department of Electrical Engineering (Advisor: Jun Won Choi)

Seoul, Korea

GPA: 4.39/4.5

Hanyang University | M.S. |

Sep. 2017 – Aug. 2019

Department of Automotive Engineering (Advisor: Jahng Hyon Park)

Seoul, Korea

Thesis: "Online Learning Based Object Tracker with Deep Reinforcement Learning"

GPA: 4.18/4.5

Hanyang University | B.S.

Mechanical Engineering

Mar. 2010 - Aug. 2017

Seoul, Korea

GPA: 3.81/4.5

#### RESEARCH PROJECTS

Representation learning for long-tailed object detection and instance segmentation.

2023 – Present

Enhancing representation learning on long-tailed dataset

Open vocabulary object detection.

2024 – Present

Object detection task using open vocalbulary

#### **PUBLICATIONS**

ST-CoNAL: Consistency-based acquisition criterion using temporal self-ensemble for active learning.

J.S. Baik, I.Y. Yoon, and J.W. Choi

Published in ACCV, 2022. (https://arxiv.org/abs/2112.07116)

DBN-Mix: Training dual branch network using bilateral mixup augmentation for long-tailed visual recognition.

J.S. Baik, I.Y. Yoon, and J.W. Choi

Published in Pattern Recognition, 2023. (https://arxiv.org/abs/2207.02173)

Learning from data with noisy labels using temporal self-ensemble.

J.H. Lee\*, J.S. Baik\*, T.H. Hwang\*, and J.W. Choi

Available in ArXiv. (https://arxiv.org/abs/2207.10354)

DaSS: Distribution-aware sample selection for learning with long-tailed noisy data.

J.S. Baik, I.Y. Yoon, and J.W. Choi

Submitted to ECCV, 2024.

#### **WORK EXPERIENCE**

## Undergraduate Research Intern.

Aug. 2016 – Dec. 2016

BMAL at Hanyang University.

Seoul, Korea

• Designed and Manufactured PCBoard for identifying and sensing hazardous chemicals in the air

## Military Service.

Jan. 2011 – Oct. 2012

Sergeant

# TEACHING EXPERIENCE

## Probability and statistics theory.

Mar. 2024 – Aug. 2024

Teaching at Hanyang University

#### HONORS AND AWARDS

#### **Graduation Honor Student.**

2017

GPA above 3.75 at Hanyang University

## Semester Honor Student.

2013, 2016

GPA above 3.75 at Hanyang University

## Academic Honor Scholarship.

2014

Merit-based scholarship

# Corps Commander Commendation (in Military Service).

2012

Awarded to 1st place in squad leader training

#### **SKILLS**

Programming: Python (NumPy, SciPy, Matplotlib, Pandas), C++, MATLAB

Deep learning tools: Pytorch, Tensorboard, Keras

**Document**: MS office, LaTex