# JaeSoon Baik

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https://github.com/soony1213

## Education

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|---|---|
| **Hanyang University** \| *Ph.D. candidate* | Sep. 2019 – Present |
| Department of Electrical Engineering (Advisor: Jun Won Choi) | Seoul, Korea |
| GPA: 4.39/4.5 | |

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| **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 | |

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| **Hanyang University** \| *B.S.* | Mar. 2010 – Aug. 2017 |
| Mechanical Engineering | Seoul, Korea |
| GPA: 3.81/4.5 | |

## Research Projects

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| **Noisy Long-tailed Learning on Classification.** | Jan. 2023 – Present |
| Classifying samples with class imbalance and noisy labels | |
| **Counterfactual explantion for enhancing interpretability and performance.** | Apr. 2023 – Present |
| Designing high-performance interpretable model using prototypical part | |
| **Open World 2D Object Detection.** | Jun. 2023 – Present |
| Object detection task on open world problem (class incremental + open set detection) | |

## 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)

**Representation learning with contextual prototypes for long-tailed instance segmentation.**
**J.S. Baik**, I.Y. Yoon, and J.W. Choi

Under review, 2023.

**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)

## Work Experience

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| **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

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| **Military Service.** | Jan. 2011 – Oct. 2012 |
| Sergeant | |

## 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**: Pytorch, Python (NumPy, SciPy, Matplotlib, Pandas), C++, MATLAB
**Document**: MS office, LaTex