## Wonho Bae

## Researcher in Computer Vision

CONTACT

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EDUCATION

**2018 - Present** 

Master's / Computer Science Univ of Massachusetts, Amherst

2013 - 2017

Bachelor / Statistics Univ of California, Berkeley

2011 - 2013

Associate / Economics Santa Monica College

Courseworks -

Computer Vision / Optimization Neural Network / Statistical ML Probabilistic Graphical Model AI / Stochastic Process

KEY SKILLS

Python / R / Java Tensorflow / Pytorch PostgreSQL

AWARDS

2011-2012

1st and 3rd places American Math Competitions

## **PROFILE**

Research enthusiast with a focus on computer vision, specifically for self, semi and weakly supervised learning in object detection framework. Currently pursuing master's degree in Computer Science at UMass and actively conducting a research on weakly supervised object localization task. Looking for a PhD position for Fall 2020.

PROFESSIONAL EXPERIENCE

## Feb 2018 - Present

Research Intern

Computer Vision Lab at Seoul National University

- Supervisor: Prof. Gunhee Kim
- Conducted a research on small object detection using Generative Adversarial Network in Faster R-CNN framework.
- Conducted a research class activation map for weaklysupervised object localization. Submitted to CVPR 2020.

May 2019 - Aug 2019

Research Fellow

Data Science for Common Good Fellowship at UMass

- Supervisor: Dr. Brant Cheikes, Prof. Matthew Rattigan
- Conducted a research on classifying wild animal images collected using camera traps in collaboration with The Nature Conservancy. Deployed a web-based open-source tool for ecologists.

Jan 2017 - Dec 2017

Research Assistant

Renewable & Appropriate Energy Lab at UC Berkeley

- Supervisor: Prof. Daniel Kammen, Prof. Deborah Sunter
- Participated in the Inclusive Green Growth project. Worked on keyword detection task using natural language process techniques to replace synonyms and pronouns in the text. Currently writing a book to publish.

Publications

- Rethinking Class Activation Maps for Weakly Supervised Object Localization, Wonho Bae\*, Junhyug Noh\*, Gunhee Kim, submitted to CVPR 2020.
- Better to Follow, Follow to be Better: Towards Precise Supervision of Feature Super-Resolution for Small Object Detection, Junhyug Noh, Wonho Bae, Wonhee Lee, Jinhwan Seo and Gunhee Kim, ICCV 2019