

HYUNJAE WOO

hjwoo@umich.edu || [linkedin.com/in/hjwoo](https://www.linkedin.com/in/hjwoo) || jaejaywoo.github.io

EDUCATION

University of Michigan, Ann Arbor
M.S.E in Computer Science and Engineering

Sep 2021 - (expected) Apr 2023

University of Michigan, Ann Arbor
B.S.E. in Computer Science and Engineering

Sep 2013 - Dec 2019

Relevant Courses: Machine Learning, Artificial Intelligence, Computer Vision, Reinforcement Learning,
Data Structure & Algorithm, Computer Networks, Computer Security, Linear Algebra

PUBLICATION

Meta Reinforcement Learning with Autonomous Inference of Subtask Dependencies

Sungryull Sohn, **Hyunjae Woo**, Jongwook Choi, Honglak Lee

In the *International Conference on Learning Representations (ICLR)*, 2020 [[arXiv](#)]

RESEARCH/WORK EXPERIENCE

University of Michigan, Ann Arbor, *Undergrad Research Assistant*
Advisors: Honglak Lee and Satinder Singh

Oct 2017 - Dec 2020

- Published a research paper in **ICLR 2020** on Meta Reinforcement Learning (RL).
- Arranged research experiments and implement baselines for SC2LE (StarCraft II Learning Environment).

U of Michigan Transportation Research Institute, *Undergrad Assistant*

Jan 2019 - May 2019

- Developed LiDAR dataset reader in C# that uses Pcap.Net to convert TCP packets into CSV files.
- Collected various LiDAR datasets for each different road lane materials and weather conditions.

Seoul National University, *Summer Research Intern*
Advisor: Gunhee Kim

May 2017 - Aug 2017

- Implemented data pipeline for image captioning baseline models (i.e. seq2seq, im2txt).
- Implemented data preprocessing for YFCC100M and Ubuntu Corpus datasets

SOFTWARE PROJECTS

Mini Netflix - Video Streaming Content Distribution Network

- Built video streaming content distribution Network (CDN) for multiple client browsers using C++.
- Implemented HTTP proxy for video bitrate adaptation and DNS server for load balancing.

Transfer Learning for Fire Detection

- Built a custom fire dataset for transfer learning with total 617 fire images and ground-truth labels.
- Fine-tuned YOLO-v2 using the pre-trained weights and the custom fire dataset with Python and Tensorflow.

Recycle.it - Eco-friendly Camera-based Web App

- Developed an eco-friendly, camera-based progressive web application using React.js.
- Implemented a barcode scan of a product that informs user with helpful recycling information.

AWARDS AND HONORS

University Honors
Dean's Honor List
George Washington University SEAS Engineering Awards

Apr 2016
Dec 2013, Apr 2016
Apr 2013

TECHNICAL SKILLS

Programming Languages
Skills & Softwares

Python, C/C++, C#, Javascript, HTML, CSS, Bash
Linux/Unix, Git, PyTorch, Tensorflow, GCP Compute Engine, AWS EC2