

HYUNJAE WOO

hjwoo@umich.edu

EDUCATION

University of Michigan - Ann Arbor
B.S.E in Computer Science & Engineering
GPA: 3.3/4.0

Sep 2013 - Present

RESEARCH EXPERIENCE

Deep Learning Lab @ Univ. of Michigan
Undergraduate Research Assistant
Advisor: Honglak Lee

Oct 2018 - Present

Reinforcement Learning Lab @ Univ. of Michigan
Undergraduate Research Assistant
Advisor: Satinder Singh

Oct 2017 - Sep 2018

Vision and Learning Lab @ Seoul National Univ.
Summer Research Intern
Advisor: Gunhee Kim

May 2017 - Aug 2017

PUBLICATIONS

Meta Reinforcement Learning with Autonomous Task Inference
Sungryull Sohn, **Hyunjae Woo**, Jongwook Choi, Honglak Lee
In the Workshop on *Neural Information Processing Systems* (NeurIPS), 2019

WORK EXPERIENCE

University of Michigan Transportation Research Institute
Undergraduate Research Assistant

Jan 2019 - May 2019

Participated in a research on improving lane detection accuracy through LiDAR dataset analysis

Seoul Metropolitan Police Agency - Foreign Affairs Dept.
Sergeant

Apr 2014 - Dec 2015

Fulfilled my military duty as an Auxiliary-Police (AP) and communications system operator

SOFTWARE PROJECTS

Recycle.it

Developed a eco-friendly, camera-based progressive web application using React.js. The application scans a barcode of a product and informs the user with helpful recycling information.

Facial-Image Sentiment Classification

Analyzed the facial image dataset through K-means algorithm and implemented autoencoder and convolutional neural networks (CNN) for classification.

TSP with Approximation and Optimization Algorithm

Implemented MST approximation and Branch-and-Bound optimization algorithms to several Traveling Salesman Problems to create an optimal circuit path to all the nodes.

RELEVANT COURSES

Core Courses

EECS498: Reinforcement Learning
EECS445: Intro to Machine Learning
EECS492: Intro to Artificial Intelligence

Other Courses

MATH217: Linear Algebra
MATH451: Advanced Calculus
MATH425: Intro to Probability
MATH412: Intro to Modern Algebra

TECHNICAL SKILLS

Programming Languages

Python, C/C++, C#, Javascript

Software & Frameworks

Linux/Unix, Tensorflow, PyTorch