

Wonjoon Goo

✉ wonjoon@cs.utexas.edu | 🏠 <http://dev.wonjoon.me> | 📷 hiwonjoon

Research Interest

Reinforcement Learning, Computer Vision, Machine Learning, and Robotics

Education

Ph.D. in Computer Science University of Texas at Austin	Aug.2016-Current
Master in Computer Science University of Texas at Austin GPA 4.0/4.0	Aug.2016-Dec.2018
B.S. in Computer Science and Engineering (Summa Cum Laude, 1/38) Seoul National University GPA 4.03/4.3 GPA in major 4.07/4.3	Mar.2008-Feb.2016
Exchange Student in Computer Science Dept. University of Toronto GPA in major 4.0/4.0	Sep.2014-Dec.2014

Work and Research Experiences

Graduate Research Assistant Personal Autonomous Robotics Lab, University of Texas at Austin Advisor : Prof. Scott Niekum	Jan.2017-Current
Research Intern Preferred Networks, Tokyo, Japan Advisor : Tommi Kerola, Toru Ogawa <ul style="list-style-type: none">• Topic: video object segmentation (VOS) Achieved 4th place on the 1st Large-scale Video Object Segmentation Challenge	May.2018-Aug.2018
Lead Web Programmer Art247, Paju, Korea <ul style="list-style-type: none">• Developing commercial website with Django web framework Site link : https://m314.kr	Apr.2016-Jun.2016
Undergraduate Research Intern	Mar.2015-Apr.2016

Vision&Learning Laboratory, Seoul National University

Advisor : Prof. Gunhee Kim

- Improving CNN performance using external information such as taxonomy
Collaborated with Prof. Sung Ju Hwang in Ulsan National Institute of Science and Technology
- Developing a motion planning algorithm in a humanoid robot using deep learning
Collaborated with Prof. Jehee Lee in Seoul National University

Lead Server Programmer

Dec.2010-Jan.2014

Ani-Park, Seoul, Korea

- Developing a distributed game server software with C++
- Maintaining RDBMS for game data with SQL
- Developing a web interface for managing clients with Node.js
- Served as an alternative military service agent

Summer Programming Intern

Jun.2010-Aug.2010

Redduck, Seoul, Korea

- Implementing game logic using Unreal Engine

Honors and Awards

Graduate Dean's Prestigious Fellowship Supplement, UT Austin	2017-2019
Kwanjeong Educational Foundation Fellowship	2016-2020
Excellent CSE Thesis Awards, Seoul National University	2016
National Scholarship for Science and Engineering	2008-2010, 2014
• Full tuition & fees during regular college years, funded by Korea Student Aid Foundation	
Outgoing Exchange Student Scholarship	2014 Fall
• \$2000 from Office of International Affairs	

Teaching Experiences

Graduate Teaching Assistant at UT Austin	2016 Fall
• CS 313E, Elements of Software Design	
Samsung Convergence Software Course (SCSC) Mentoring Program	Mar.2015-Dec.2015
• Chosen as a mentor to help students coming for double major in CSE	

Skills

Programming Language and Databases

Python, C++, SQL (Experienced) / Matlab, NoSQL (mongodb), javascripts (Intermediate) /
Vim, CUDA, Scala (Interested)

Deep Learning Framework

Tensorflow, Chainer, Caffe, Torch (Experienced)

Publications

International Conferences

1. **Wonjoon Goo**, Juyong Kim, Gunhee Kim, and Sung Ju Hwang. *Taxonomy-Regularized Semantic Deep Convolutional Neural Networks*. European Conference on Computer Vision (ECCV 2016). Amsterdam, The Netherlands. 2016.
2. **Wonjoon Goo**, and Scott Niekum. *One-Shot Learning of Multi-Step Tasks from Observation via Activity Localization in Auxiliary Video*. International Conference on Robotics and Automation 2019 (ICRA 2019). Montreal, Canada. 2019.

In progress

1. **Wonjoon Goo**, Daniel Brown, and Scott Niekum. *Extrapolating Beyond Suboptimal Demonstrations via Inverse Reinforcement Learning from Observations*.

Last updated: February 20, 2019