Wonjoon Goo

Research Interest

Reinforcement Learning, Computer Vision, Machine Learning, and Robotics

Education

Ph.D. in Computer Science

Aug.2016-Current

University of Texas at Austin

Master in Computer Science Aug. 2016-Dec. 2018

University of Texas at Austin

GPA 4.0/4.0

B.S. in Computer Science and Engineering (Summa Cum Laude, 1/38)

Mar.2008-Feb.2016

Seoul National University

GPA 4.03/4.3 GPA in major 4.07/4.3

Exchange Student in Computer Science Dept. Sep.2014-Dec.2014

University of Toronto GPA in major 4.0/4.0

Work and Research Experiences

Graudate Research Assitant Jan.2017-Current

Personal Autonomous Robotics Lab, University of Texas at Austin

Advisor: Prof. Scott Niekum

Research Intern May.2018-Aug.2018

Preferred Networks, Tokyo, Japan

Advisor : Tommi Kerola, Toru Ogawa

• Topic: video object segmentation (VOS)

Achieved 4th place on the 1st Large-scale Video Object Segmentation Challenge

Lead Web Programmer

Apr.2016-Jun.2016

Art247, Paju, Korea

Developing commercial website with Django web framework
 Site link: https://m314.kr

Undergraduate Research Intern

Mar.2015-Apr.2016

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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

• Choosen 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)

Wonjoon Goo

Deep Learning Framework

Tensorflow, Chainer, Caffe, Torch (Experienced)

Publications

International Conferences

1. Wonjoon Goo*, Daniel Brown*, and Scott Niekum (*equal contribution). Extrapolating Beyond Suboptimal Demonstrations via Inverse Reinforcement Learning from Observations. International Conference on Machine Learning (ICML). Long Beach, CA, 2019.

- 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 (ICRA). Montreal, Canada, 2019.
- 3. Wonjoon Goo, Juyong Kim, Gunhee Kim, and Sung Ju Hwang. *Taxonomy-Regularized Semantic Deep Convolutional Neural Networks*. European Conference on Computer Vision (ECCV). Amsterdam, The Netherlands, 2016.

Last updated: April 21, 2019