

YURONG YOU

PH.D. CANDIDATE, COMPUTER SCIENCE

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EDUCATION

Cornell University

Aug 2018 - Present

Ph.D. Candidate, Computer Science

Shanghai Jiao Tong University

Sept 2014 - Jun 2018

Bachelor of Engineering (Zhiyuan Honors Degree), Computer Science, ACM Honors Class
- Advisors: Prof. [Yong Yu](#) and Prof. [Cewu Lu](#)

RESEARCH EXPERIENCE

Lab of Prof. Kilian Q. Weinberger at Cornell University

Visiting Undergraduate Research Intern

Sep 2017 - Dec 2017

- Advisor: Prof. [Kilian Q. Weinberger](#)

- Resource Aware Person Re-identification across Multiple Resolutions.

Developed a new person re-identification model (*Deeply Supervised Multi-Resolution Cascades*) that substantially improves over the previous state-of-the-art results on all five re-ID datasets and can be used to effectively tradeoff accuracy and computation in the presence of resource constraints. (CVPR 2018 paper)

Computational Vision and Geometry Lab at Stanford University

Visiting Undergraduate Research Intern

Jun 2017 - Aug 2017

- Advisor: Prof. [Silvio Savarese](#)

- Multimodal Deep Reinforcement Learning for Robotics.

Constructed a simulation environment for peg-in-hole insertion tasks with non-cylindrical pegs, implemented a parallel version of the DDPG algorithm and created a calibration system for Kinect2-to-robot perception transformation.

Machine Vision and Intelligence Group at Shanghai Jiao Tong University

Research Assistant

Aug 2016 - present

- Advisor: Prof. [Cewu Lu](#)

- Deep Reinforcement Learning for Autonomous Driving.

Constructed a special version of TORCS for deep RL training (open-sourced) and developed a *Virtual-to-Real Reinforcement Learning* pipeline for real-data-adaptable visual autonomous driving. (BMVC 2017 spotlight)

PUBLICATION

Virtual to Real Reinforcement Learning for Autonomous Driving

Xinlei Pan*, **Yurong You***, Ziyang Wang, Cewu Lu

Spotlight (8% acc), *British Machine Vision Conference* (BMVC) 2017

Resource Aware Person Re-identification across Multiple Resolutions

Yan Wang*, Lequn Wang*, **Yurong You***, Xu Zou, Vincent Chen, Serena Li,

Bharath Hariharan, Gao Huang, Kilian Q. Weinberger

Conference on Computer Vision and Pattern Recognition (CVPR) 2018

SELECTED PROJECTS

TORCS for Reinforcement Learning

Open-source for facilitating further research.

May 2017

- Constructed a special version of *TORCS* (The Open Racing Car Simulator) suiting the need of training deep reinforcement learning autonomous driving models.

* indicates equal contribution

Monte Carlo Path Tracer CS230 *Virtual Reality and Interactive 3D Graphics*, **99.88/100**

May 2017

- Developed a graphical engine from scratch that implements a Monte Carlo Path Tracer and supports various realistic effects such as *color bleeding*, *soft shadow*, *caustic*, etc.

Five-Stage MIPS Pipeline in Verilog HDL MS108 *Computer Architecture*, **97/100**

Aug 2016

- Designed and implemented a five-stage pipeline for most MIPS integer operations with forwarding optimization.

Compiler Mango MS208 *Compiler Design and Implementation*, **99/100**

May 2016

- Designed and implemented a highly functional compiler from *Lexical Analysis* to *Register Allocation* phase with graph-coloring optimization.

HONORS
AND
AWARDS

Zhiyuan Outstanding Graduate Scholarship	2018
Lixin Tang Scholarship of Shanghai Jiao Tong Univ. (Top 1%)	2017, 2016
Zhiyuan Honorary Scholarship (Zhiyuan College exclusive)	2016, 2015
Academic Excellence Scholarship (Class A) of SJTU. (Top 5%)	2015
KoGuan Encouragement Scholarship of SJTU. (Top 4%)	2015

TEACHING
EXPERIENCE

CS 2110: OO Programming and Data Structures <i>Teaching Assistant</i>	Aug - Dec 2018
CS 259: Numerical Methods for Data Science <i>Teaching Assistant</i>	Mar - June 2018
MS208: Compiler Design and Implementation <i>Teaching Assistant</i>	Mar - June 2017

PROGRAMMING
PROFICIENCIES

C/C++, Python (Numpy, TensorFlow, PyTorch), Lua (Torch), MATLAB, \LaTeX
Java, Verilog HDL

INTERESTS
AND
ACTIVITIES

Philosophy, Psychology, Physics
Debate (Former Vice-captain of Zhiyuan College Debate Team)
Half-Marathon Finisher (2:06:27) of Shanghai International Marathon 2016

Last Update: August 12, 2018