

YURONG YOU

SENIOR UNDERGRADUATE, COMPUTER SCIENCE

ACM Class, Zhiyuan College, Shanghai Jiao Tong University
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- EDUCATION** **Shanghai Jiao Tong University** Sept 2014—2018 (expected)
Bachelor of Engineering, Computer Science, ACM Honors Class, Zhiyuan College
- **ACM Honors Class** is a highly selective class (**top 30** students) in CS Department
 - **GPA**: 4.01/4.30, **Score Average**: 92.22/100 (3/27)
 - Advisors: Prof. [Yong Yu](#) and Prof. [Cewu Lu](#)
- RESEARCH EXPERIENCE** **Lab of Prof. Kilian Q. Weinberger at Cornell University** Sep 2017 - Dec 2017
Visiting Undergraduate Research Intern
- 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 submission)
- Computational Vision and Geometry Lab at Stanford University** June 2017 - Aug 2017
Visiting Undergraduate Research Intern
- 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** Aug 2016-present
Research Assistant
- 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)
- National Institute of Informatics of Japan** Aug 2016
Short-term Exchange Student (2 weeks)
- **Reinforcement Learning on Video Games.**
Developed a policy gradient model for Atari *Pong* game, which was trained from scratch and achieved human performance.
- 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
- UNDER REVIEW** **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
Submitted to the *Conference on Computer Vision and Pattern Recognition (CVPR)* 2018

* indicates equal contribution

SELECTED PROJECTS	TORCS for Reinforcement Learning 	
	Open-source for facilitating further research.	May 2017
	- Constructed a special version of <i>TORCS</i> (The Open Racing Car Simulator) suiting the need of training deep reinforcement learning autonomous driving models.	
	Monte Carlo Path Tracer 	
	CS230 <i>Virtual Reality and Interactive 3D Graphics</i> , 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 <i>color bleeding</i> , <i>soft shadow</i> , <i>caustic</i> , etc.	
	Five-Stage MIPS Pipeline in Verilog HDL 	
	MS108 <i>Computer Architecture</i> , 97/100	Aug 2016
	- Designed and implemented a five-stage pipeline for most MIPS integer operations with forwarding optimization.	
	Compiler Mango 	
	MS208 <i>Compiler Design and Implementation</i> , 99/100	May 2016
	- Designed and implemented a highly functional compiler from <i>Lexical Analysis</i> to <i>Register Allocation</i> phase with graph-coloring optimization.	
HONORS AND AWARDS	Lixin Tang Scholarship of Shanghai Jiao Tong Univ. (Top 1%)	2017, 2016
	2 nd Prize, Deep Learning and Security Innovation Hackathon @ Singapore	2017
	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
	1st Prize at the Provincial Level (Fujian) of China Physics Olympiads (24/10190)	2013
TEACHING EXPERIENCE	Compiler Design and Implementation (MS208)	
	<i>Teaching Assistant</i>	Mar-June 2017
PROGRAMMING PROFICIENCIES	C/C++, Python (Numpy, TensorFlow, PyTorch), Lua (Torch), MATLAB, L ^A T _E X 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: December 14, 2017