





# YURONG YOU

SENIOR UNDERGRADUATE, COMPUTER SCIENCE

ACM Class, Zhiyuan College, Shanghai Jiao Tong University  
yurongyou@sjtu.edu.cn  
yurongyou.com

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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), In Proceedings of *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 *Conference on Computer Vision and Pattern Recognition* (CVPR) 2018

\* indicates equal contribution

SELECTED PROJECTS	<p><b>TORCS for Reinforcement Learning</b> </p> <p>Open-source for facilitating further research. <span style="float: right;">May 2017</span></p> <ul style="list-style-type: none"> <li>- Constructed a special version of <i>TORCS</i> (The Open Racing Car Simulator) suiting the need of training deep reinforcement learning autonomous driving models.</li> </ul> <p><b>Monte Carlo Path Tracer</b> </p> <p>CS230 <i>Virtual Reality and Interactive 3D Graphics</i>, <b>99.88/100</b> <span style="float: right;">May 2017</span></p> <ul style="list-style-type: none"> <li>- 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.</li> </ul> <p><b>Five-Stage MIPS Pipeline in Verilog HDL</b> </p> <p>MS108 <i>Computer Architecture</i>, <b>97/100</b> <span style="float: right;">Aug 2016</span></p> <ul style="list-style-type: none"> <li>- Designed and implemented a five-stage pipeline for most MIPS integer operations with forwarding optimization.</li> </ul> <p><b>Compiler Mango</b> </p> <p>MS208 <i>Compiler Design and Implementation</i>, <b>99/100</b> <span style="float: right;">May 2016</span></p> <ul style="list-style-type: none"> <li>- Designed and implemented a highly functional compiler from <i>Lexical Analysis</i> to <i>Register Allocation</i> phase with graph-coloring optimization.</li> </ul>
HONORS AND AWARDS	<p>Lixin Tang Scholarship of Shanghai Jiao Tong Univ. (<b>Top 1%</b>) <span style="float: right;">2017, 2016</span></p> <p>2<sup>nd</sup> Prize, Deep Learning and Security Innovation Hackathon @ Singapore <span style="float: right;">2017</span></p> <p>Zhiyuan Honorary Scholarship (<b>Zhiyuan College exclusive</b>) <span style="float: right;">2016, 2015</span></p> <p>Academic Excellence Scholarship (<b>Class A</b>) of SJTU. (<b>Top 5%</b>) <span style="float: right;">2015</span></p> <p>KoGuan Encouragement Scholarship of SJTU. (<b>Top 4%</b>) <span style="float: right;">2015</span></p> <p><b>1<sup>st</sup> Prize</b> at the Provincial Level (Fujian) of China Physics Olympiads (<b>24/10190</b>) <span style="float: right;">2013</span></p>
TEACHING EXPERIENCE	<p>Compiler Design and Implementation (MS208)</p> <p><i>Teaching Assistant</i> <span style="float: right;">Mar-June 2017</span></p>
PROGRAMMING PROFICIENCIES	<p>C/C++, Python (Numpy, TensorFlow, PyTorch), Lua (Torch), MATLAB, L<sup>A</sup>T<sub>E</sub>X</p> <p>Java, Verilog HDL</p>
INTERESTS AND ACTIVITIES	<p>Philosophy, Psychology, Physics</p> <p>Debate (Former Vice-captain of Zhiyuan College Debate Team)</p> <p>Half-Marathon Finisher (2:06:27) of Shanghai International Marathon 2016</p>

*Last Update: December 10, 2017*