

# Kentaro Wada

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<b>PORTFOLIO</b>	wkentaro.com <i>Extensive listing of cocurricular and research projects.</i>	
<b>DISTINCTION</b>	University of Tokyo, Toyota Dwango Advanced AI Fellowship	2017
	Google Summer of Code Student <i>Completed an open source project from the Open Source Robotics Foundation.</i>	2016
	5th Place Winners (Pick Task) at the Amazon Picking Challenge <i>An internationally recognised premier robotics competition.</i>	2016
<b>PUBLICATIONS</b>	<b>Kentaro Wada</b> , Shingo Kitagawa, Kei Okada, and Masayuki Inaba, “Instance Segmentation of Visible and Occluded Regions for Finding and Picking Target from a Pile of Objects”, <i>Under review at the IEEE International Conference on Intelligent Robots and Systems (IROS)</i> , 2018. <a href="#">[Paper]</a> <a href="#">[Movie]</a> <b>Kentaro Wada</b> , Kei Okada, and Masayuki Inaba, “Probabilistic 3D Multilabel Real-time Mapping for Multi-object Manipulation”, <i>IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)</i> , 2017. <a href="#">[Paper]</a> <a href="#">[Movie]</a> . <b>Kentaro Wada</b> , Makoto Sugiura, Iori Yanokura, Yuto Inagaki, Kei Okada, and Masayuki Inaba, “Pick-and-Verify: Verification-based Highly Reliable Picking System for Various Target Objects in Clutter”, <i>Journal of Advanced Robotics</i> , 2017. <a href="#">[Paper]</a> <a href="#">[Movie]</a> <b>Kentaro Wada</b> , Masaki Murooka, Kei Okada, and Masayuki Inaba, “3D Object Segmentation for Shelf Bin Picking by Humanoid with Deep Learning and Occupancy Voxel Grid Map”, <i>IEEE-RAS International Conference on Humanoid Robotics (Humanoids)</i> , 2016. <a href="#">[Paper]</a> <a href="#">[Movie]</a> Cancun, Mexico. November 2016.	
<b>RESEARCH EXPERIENCE</b>	Leader of the UTokyo Team at the Amazon Robotics Challenge <i>JSK Robotics Laboratory at the University of Tokyo</i> Supervisor: Associate Prof. Kei Okada Objectives: To develop a robust state-of-the-art robot picking system for warehouse automation. 2015 edition: Verification based robust picking system by in-hand recognition. 2016 edition: Deep learning based 3D semantic segmentation. 2017 edition: Few-shot deep learning of novel object segmentation using only instance images.	2015 – 2017
	Research Assistant at the UTokyo JSK Robotics Lab <i>JSK Robotics Laboratory at University of Tokyo</i> Supervisor: Associate Prof. Kei Okada Objectives: To develop a system of continuous integration of a robotic system as a whole: (1) Same software as a robotic system on simulation and real world. (2) Enable motion testing by a simulator with dynamics.	2015 – 2017
<b>KEY SKILLS</b>	<ul style="list-style-type: none"><li>▪ High-level programming skills, especially with Python and C++, trained in the research use and contributions to open source projects at <a href="#">GitHub</a>.</li><li>▪ Experience and knowledge of constructing a large robot vision system integrating various kinds of hardware and software with the Robot Operating System (ROS).</li><li>▪ Knowledge of deep learning implementation with the frameworks including, Chainer, PyTorch and Caffe, and GPU computing using CUDA.</li></ul>	
<b>INTERESTS</b>	Deep learning, Scene understanding, 3D reconstruction, Real-time vision system.	