

# Kentaro Wada

Wood Lane, White City, London, United Kingdom  
www.kentaro.wada@gmail.com • +44 7535-753123

Date of birth: 31 January 1994 • Nationality: Japan • Portfolio: wkentaro.com

---

<b>EDUCATION</b>	<b>Imperial College London</b> PhD in Computing <span style="float: right;">2018 – 2022</span> Supervisors: Prof. Andrew Davison, Dr. Stefan Leutenegger
	<b>University of Tokyo</b> MS in Information Science and Technology <span style="float: right;">2016 – 2018</span> BE in Mechano-Informatics <span style="float: right;">2012 – 2016</span> Supervisors: Prof. Masayuki Inaba, Prof. Kei Okada
<b>DISTINCTION</b>	PhD President’s Scholarship of Imperial College London <span style="float: right;">2018 – 2022</span> <i>Full funded scholarship, and fifty PhD students are selected each year.</i>  IEEE Robotics and Automation Society Japan Joint Chapter Young Award at IROS2018 <span style="float: right;">2018</span> <i>Five Japanese students are nominated based on their papers at the conference.</i>  Google Summer of Code Student <span style="float: right;">2016</span> <i>Completed an open source project from the Open Source Robotics Foundation.</i>
<b>PUBLICATIONS</b>	<b>Kentaro Wada</b> , Kei Okada, and Masayuki Inaba, “Joint Learning of Instance and Semantic Segmentation for Robotic Pick-and-Place with Heavy Occlusions in Clutter”, <i>IEEE International Conference on Robotics and Automation (ICRA)</i> , 2019. [ <a href="#">Paper</a> ] [ <a href="#">Video</a> ] <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>IEEE International Conference on Intelligent Robots and Systems (IROS)</i> , 2018. [ <a href="#">Paper</a> ] [ <a href="#">Video</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="#">Video</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="#">Video</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="#">Video</a> ]
<b>RESEARCH EXPERIENCE</b>	Leading the UTokyo Team at the Amazon Robotics Challenge <span style="float: right;">2015 – 2017</span> <i>JSK Robotics Laboratory at the University of Tokyo</i> <ul style="list-style-type: none"><li>▪ 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.</li></ul>
<b>KEY SKILLS</b>	<ul style="list-style-type: none"><li>▪ 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, Real-time SLAM, Robotic manipulation.