Kentaro Wada

https://wkentaro.com
www.kentaro.wada@gmail.com • +44 7535-753123
Date of birth: 31 January 1994 • Nationality: Japan • Location: London, UK

EDUCATION

Imperial College London
PhD in Computing   *2018 – 2022*
Supervisor: Prof. Andrew J. Davision

The University of Tokyo
MS in Information Science and Technology   *2016 – 2018*
BE in Mechano-Informatics   *2012 – 2016*
Supervisors: Prof. Masayuki Inaba, Prof. Kei Okada

WORK EXPERIENCE

Minerva Technologies Inc., Japan (Remote, Contract)   *2016 – 2022*
Tumor detection in images by deep learning, and its evaluation for approval review.
Corvus Robotics Inc., San Francisco (Remote, Contract)   *2020 – 2021*
Real-time warehouse inventory inspection with drones via semantic segmentation with deep learning.
Honda Research Institute, Inc., Tokyo (Summer internship)   *2014*
Autonomous safety braking system for driver assistance with deep learning.
Donuts Co. Ltd., Tokyo (Part-time)   *2013 – 2014*
Web system engineer for E-commerce shops using PHP, SQL, and HTML/CSS.

DISTINCTION

Contributions to the Open Source Community on GitHub   *2015 - 2022*
Created popular software with 1-8k stars and 500-1000 daily traffics (e.g., Labelme, Gdown).

PhD President's Scholarship of Imperial College London   *2018 – 2022*
One of the fifty PhD students for the full funded scholarship*1.

Two Patents on Object 6D Pose Estimation   *2021*
Invented methods for 3D object-level scene understanding using vision sensors*2, 3.

IEEE Robotics and Automation Society Japan Joint Chapter Young Award at IROS 2018   *2018*
One of the five Japanese students nominated with their conference papers*4.

Lead the UTokyo Team at the Amazon Robotics Challenge   *2015 – 2017*
Won the 5th place our of 16 teams in 2016. Mainly worked on the vision part*5.

PUBLICATIONS

- *Kentaro Wada*, Stephen James, and Andrew J. Davison, "ReorientBot: Learning Object Reorientation for Specific-Posed Placement", IEEE International Conference on Robotics and Automation (ICRA), 2022. [Paper] [Video] [Webpage]
- *Kentaro Wada*, Stephen James, and Andrew J. Davison, "SafePicking: Learning Safe Object Extraction via Object-Level Mapping", IEEE International Conference on Robotics and Automation (ICRA), 2022. [Paper] [Video] [Webpage]
- *Kentaro Wada*, Edgar Sucar, Stephen James, Daniel Lenton, and Andrew J. Davison, "MoreFusion: Multi-object Reasoning for 6D Pose Estimation from Volumetric Fusion", IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2020. [Paper] [Video] [Webpage]
- *Kentaro Wada*, Shingo Kitagawa, Kei Okada, and Masayuki Inaba, "Instance Segmentation of Visible and Occluded Regions for Finding and Picking Target from a Pile of Objects", IEEE International Conference on Intelligent Robots and Systems (IROS), 2018. [Paper] [Video]

See more…

KEY SKILLS

- **Coding and software development** with Python and C++ for deep learning, scene reconstruction, 2D/3D visualization, physics simulation, CLI tools, and GUI/Web applications.
- **SLAM and 3D semantic scene understanding** with expertise in object tracking, reconstruction, detection and pose estimation using onboard vision sensors and deep learning.
- **Real-time vision and robotic system building** for 3D scene understanding and motion generation with expertise in integration and design with asynchronous, distributed compute.

INTERESTS

Deep Learning, 3D Computer Vision, Robotics