

## Dr. Changjae Oh

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Google Scholar: <https://scholar.google.com/citations?user=wQVWb98AAAAJ&hl=en>

### Career

- 2019 – present Lecturer (Assistant Professor),  
School of Electronic Engineering and Computer Science,  
Queen Mary University of London, UK
- 2018 – 2019 Postdoctoral Researcher,  
School of Electronic Engineering and Computer Science,  
Queen Mary University of London, UK

### Education

- 2013 – 2018 Ph.D., School of Electrical and Electronic Engineering,  
Yonsei University, Seoul, Republic of Korea.
- 2011 – 2013 M.S., School of Electrical and Electronic Engineering,  
Yonsei University, Seoul, Republic of Korea.
- 2007 – 2011 B.S., School of Electrical and Electronic Engineering,  
Yonsei University, Seoul, Republic of Korea.

### Selected Projects

- 2024 – 2025 Principal investigator,  
Generative Models-based Human-to-Robot Handover Environment, The Royal Society, UK
- 2019 – 2021 Project member,  
Collaborative Object Recognition, Shared Manipulation and Learning (CORSMAL),  
EPSRC, UK
- 2018 – 2019 Post-doctoral research assistant,  
Nuclear Centre for Nuclear Robotics (NCNR), EPSRC, UK
- 2017 – 2018 Research assistant,  
Deep Audio-Visual Representation Learning for Multimedia Perception and Reproduction,  
NRF, Republic of Korea
- 2015 – 2015 Research assistant,  
Correspondence Matching between Images in Paired Camera, Samsung Electronics,  
Republic of Korea

### Academic Experience

#### Organizing committee

- 2022 CIS Intelligent Sensing Summer School (organizer),  
International Conference on System-Integrated Intelligence (Track chair),  
IEEE International Conference on Image Processing (Session chair)
- 2023 CIS Intelligent Sensing Winter School (organizer)
- 2024 CIS Intelligent Sensing Winter School (organizer),  
ACM SIGGRAPH European Conference on Visual Media Production (Local arrangement chair)  
British Machine Vision Conference 2024 (Area chair)
- 2025 Robotic Grasping and Manipulation Competition @ IEEE International Conference on Robotics  
and Automation 2025 (organizing committee),  
ACM SIGGRAPH European Conference on Visual Media Production (Short papers chair),  
IEEE Intelligent Vehicles Symposium Workshop on World Models and Their Safety Guarantee  
Techniques for End-to-End Autonomous Driving Agents (organizing committee)

#### Reviewer

*International Journal of Computer Vision, IEEE Transactions on Image Processing, IEEE International Conference on Robotics and Automation, IEEE Transactions on Industrial Informatics, IEEE Transactions on Neural Networks and Learning Systems, IEEE Transactions on Multimedia, IEEE Computer Vision and Pattern Recognition, British Machine Vision Conference, IEEE/RSJ International Conference on Intelligent Robots and Systems*

## Selected Publications (since 2019)

### Book chapter

**C. Oh**, A. Xompero, A. Cavallaro, “Visual adversarial attacks and defenses,” *Advanced Methods and Deep Learning in Computer Vision*, pp. 511–543, Academic Press, 2022.

### Journal articles

L. Tian, **C. Oh**, A. Cavallaro, “Test-time Adaptation for 6D Pose Tracking,” *Pattern Recognition*, 2024.

I. Vitanov, I. Farkhatdinov, B. Denoun, F. Palermo, A. Otaran, J. Brown, B. Omarali, T. Abrar, M. Hansard, **C. Oh**, S. Poslad, C. Liu, H. Godaba, K. Zhang, L. Jamone, K. Althoefer, “A Suite of Robotic Solutions for Nuclear Waste Decommissioning,” *Robotics*, vol. 10, no. 4, Oct. 2021.

A. Shamsabadi, **C. Oh**, A. Cavallaro, “Semantically Adversarial Learnable Filters,” *IEEE Transactions on Image Processing (TIP)*, vol. 30, pp. 8075–8087, Sep. 2021.

**C. Oh**, A. Cavallaro, “View-Action Representation Learning for Active First-Person Vision,” *IEEE Transactions on Circuits Systems and Video Technology (TCSVT)*, vol. 32, no. 2, pp. 480–491, Feb. 2021.

T. Song, Y. Kim, **C. Oh**, H. Jang, N. Ha, K. Sohn, “Simultaneous Deep Stereo Matching and Dehazing with Feature Attention,” *International Journal of Computer Vision (IJCV)*, vol. 128, pp. 799–817, Jan. 2020.

**C. Oh**, B. Ham, H. Kim, A. Hilton, K. Sohn, “OCEAN: Object-Centric Arranging Network for Self-supervised Visual Representations Learning,” *Expert Systems with Applications (ESWA)*, vol. 125, pp. 281–292 Jul. 2019.

### Conference proceedings

L. Tian, A. Sorrenti, Y. L. Pang, G. Bellitto, S. Palazzo, C. Spampinato, **C. Oh**, “Incremental Object 6D Pose,” *International Conference on Pattern Recognition (ICPR)*, Dec. 2024.

Z. Ye, C. Cho, **C. Oh**, “Improving Image De-Raining Using Reference-Guided Transformers,” *IEEE International Conference on Image Processing (ICIP)*, Oct. 2024.

J. Corsetti, D. Boscaini, **C. Oh**, A. Cavallaro, F. Poiesi, “Improving Image De-Raining Using Reference-Guided Transformers,” *IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, Jun. 2024.

J. Kim, **C. Oh**, H. Do, S. Kim, K. Sohn, “Diffusion-driven GAN Inversion for Multi-Modal Face Image Generation,” *IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)*, Jun. 2024.

M. Xing, Z. Feng, Y. Su, **C. Oh**, “Learning by Erasing: Conditional Entropy based Transferable Out-Of-Distribution Detection,” *AAAI Conference on Artificial Intelligence*, Feb. 2024.

A. Smiles, K. Chavanakunakorn, B. Omarali, **C. Oh**, I. Farkhatdinov, “Implementation of a Stereo Vision System for a Mixed Reality Robot Teleoperation Simulator,” *Annual Conference Towards Autonomous Robotic Systems*, 2023.

A. Pighetti, F. Bellotti, **C. Oh**, L. Lazzaroni, L. Forneris, M. Fresta, R. Berta, “Investigating Adversarial Policy Learning for Robust Agents in Automated Driving Highway Simulations,” *International Conference on Applications in Electronics Pervading Industry, Environment and Society*, 2023.

L. Tian, A. Cavallaro, **C. Oh**, “Cluster-based 3D Keypoint Detection for Category-agnostic 6D Pose Tracking,” *IEEE International Conference on Image Processing (ICIP)*, Oct. 2022.

H. Wang\*, C. Zhu\*, Z. Ma, **C. Oh**, “Improving Generalization of Deep Networks for Estimating Physical Properties of Containers and Fillings,” *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), Grand Challenge on Audio-visual object classification for human-robot collaboration (1st place)*, May 2022. (\* equal contribution)

H. Wang, **C. Oh**, “Boosting Video Object Segmentation based on Scale Inconsistency,” *IEEE International Conference on Multimedia and Expo (ICME)*, Jul. 2022.

Z. Ma, **C. Oh**, “A Wavelet-based Dual-stream Network for Underwater Image Enhancement,” *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, May 2022.

J. Cho, J. Lee, **C. Oh**, W. Song, K. Sohn, “Wide and Narrow: Video Prediction from Context and Motion,” *British Machine Vision Conference. (BMVC)*, Nov. 2021.

**C. Oh**, Y. Pang, A. Cavallaro, “OHPL: One-shot Hand-eye Policy Learner,” *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, Sep. 2021.

F. Palermo, L. Ardila, **C. Oh**, K. Althoefer, S. Poslad, G. Venture, I. Farkhatdinov, “Multi-modal robotic visual-tactile localisation and detection of surface cracks,” *IEEE International Conference on Automation Science and Engineering (CASE)*, Aug. 2021.

Y. Pang, A. Xompero, **C. Oh**, A. Cavallaro, “Towards safe human-to-robot handovers of unknown containers,” *IEEE International Conference on Robot and Human Interactive Communication (ROMAN)*, Aug. 2021.

A. Shamsabadi, **C. Oh**, A. Cavallaro, “Edgefool: An Adversarial Image Enhancement Filter,” *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)*, May 2020.

**C. Oh**, A. Cavallaro, “Learning Action Representations for Self-supervised Visual Exploration,” *IEEE International Conference on Robotics and Automation (ICRA)*, May 2019.