

# Kuan-Wei Tseng

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RESEARCH INTEREST	3D Computer Vision, Image Processing, Multimedia (AR/VR), Robotics	
EDUCATION	<b>M.S.</b> , Department of Computer Science, Tokyo Institute of Technology (Tokyo Tech)	Since 2022
	Advised by Prof. Ikuro Sato and Prof. Rei Kawakami.	
	<b>B.S.</b> , Department of Mechanical Engineering, National Taiwan University (NTU)	2016–2020
EXPERIENCE	<b>Research Assistant</b> , National Taiwan University	2019–Now
	Supervised by Prof. <a href="#">Chu-Song Chen</a> and Prof. <a href="#">Yi-Ping Hung</a> .	
	<ul style="list-style-type: none"><li>• <b>Image Processing.</b> Designed and implemented ArtNV, a stylized novel view synthesis pipeline that generate spatially consistent novel views for emerging 3D display applications.</li></ul>	
	<ul style="list-style-type: none"><li>• <b>Computer Vision.</b> Contributed to Deep3D, an learning-based video stabilization algorithm that first leveraged self-supervised learning of depth and pose to model and smooth camera motion.</li></ul>	
	<ul style="list-style-type: none"><li>• <b>Virtual Reality.</b> Analyzed user experience on multisensory feedback. Developed an olfactory display system that exhausts scented gases by subwoofers to enhance immersive VR experience.</li></ul>	
	<b>Teaching Assistant</b> , National Taiwan University	
	• CSIE 4004 Computer Science and Information Technology (II)	Spring 2022
	• CSIE 5079 Pattern Classification and Analysis	Spring 2021
	• CSIE 5429 3D Computer Vision with Deep Learning Applications	Spring 2021, 2022
HONORS	<b>Reviewer of WACV 2022</b> , IEEE Signal Process. Lett. 2022	
	<b>Best Student Paper Award</b> , ACM International Conference on Multimedia (MM)	2021
	<b>Best Paper Award</b> , IPPR Conference on Computer Vision, Graphics, and Image Processing	2020
	<b>JASSO Scholarship</b> , Nagoya University Short-Term Japanese Language Program	2018
COMPETENCES	<b>Languages.</b> Mandarin Chinese ( <i>native</i> ), English ( <i>fluent</i> , TOEFL 104), Japanese ( <i>fluent</i> , JLPT N1)	
	<b>Programming Languages.</b> Python, C++, MATLAB, SQL, HTML	
	<b>Library, Software, and Tools.</b> PyTorch, OpenCV, ROS, Git, Latex, AutoCAD, Inventor	
SELECTED PUBLICATIONS	<ol style="list-style-type: none"><li>[1] <b>Kuan-Wei Tseng*</b>, Jing-Yuan Huang*, Yang-Shen Chen, Chu-Song Chen, Yi-Ping Hung, "Pseudo-3D Scene Modeling for Virtual Reality Using Stylized Novel View Synthesis", in <i>ACM SIGGRAPH Posters</i>, 2022. (*Co-first authors) 🔗</li><li>[2] <b>Kuan-Wei Tseng</b>, Yao-Chih Lee, Chu-Song Chen, "Artistic Style Novel View Synthesis Based on A Single Image", in <i>Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) Workshops</i>, 2022. 🔗</li><li>[3] You-Yang Hu, Yao-Fu Jan, <b>Kuan-Wei Tseng</b>, You-Shin Tsai, Hung-Ming Sung, Jin-Yao Lin, Yi-Ping Hung, "aBio: Active Bi-Olfactory Display Using Subwoofers for Virtual Reality", in <i>Proceedings of the 29th ACM International Conference on Multimedia (MM)</i>, 2021. (Oral Paper; Best Student Paper) 🔗</li><li>[4] Yao-Chih Lee, <b>Kuan-Wei Tseng</b>, Yu-Ta Chen, Chien-Cheng Chen, Chu-Song Chen, Yi-Ping Hung, "3D Video Stabilization with Depth Estimation by CNN-based Optimization", in <i>Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)</i>, 2021. 🔗</li><li>[5] Yu-Ta Chen, <b>Kuan-Wei Tseng</b>, Yao-Chih Lee, Chun-Yu Chen, Yi-Ping Hung, "PixStabNet: Fast Multi-Scale Deep Online Video Stabilization with Pixel-Based Warping", in <i>Proceedings of the IEEE International Conference on Image Processing (ICIP)</i>, 2021. 🔗</li><li>[6] Yao-Fu Juan, <b>Kuan-Wei Tseng</b>, Peng-Yuan Kao and Yi-Ping Hung, "Augmented Tai-Chi Chuan Practice Tool with Pose Evaluation", in <i>Proceedings of the IEEE International Conference on Multimedia Information Processing and Retrieval (MIPR)</i>, 2021. (Oral Paper) 🔗</li></ol>	