

Kuan-Wei Tseng

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RESEARCH INTEREST	3D Computer Vision, Image Processing, Multimedia (AR/VR), Robotics	
EDUCATION	M.S. , Department of Computer Science, Tokyo Institute of Technology (Tokyo Tech)	Since 2022
	Advised by Prof. Ikuro Sato and Prof. Rei Kawakami.	
	B.S. , Department of Mechanical Engineering, National Taiwan University (NTU)	2016–2020
EXPERIENCE	Research Assistant , National Taiwan University	2019–Now
	Supervised by Prof. Chu-Song Chen and Prof. Yi-Ping Hung .	
	<ul style="list-style-type: none">• Image Processing. Designed and implemented ArtNV, a stylized novel view synthesis pipeline that generate spatially consistent novel views for emerging 3D display applications.	
	<ul style="list-style-type: none">• Computer Vision. 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.	
	<ul style="list-style-type: none">• Virtual Reality. Analyzed user experience on multisensory feedback. Developed an olfactory display system that exhausts scented gases by subwoofers to enhance immersive VR experience.	
HONORS	Teaching Assistant , 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
COMPETENCES	Reviewer of WACV 2023 , IEEE Signal Process. Lett. 2022	
	Best Student Paper Award , ACM International Conference on Multimedia (MM)	2021
	Best Paper Award , IPPR Conference on Computer Vision, Graphics, and Image Processing	2020
	JASSO Scholarship , Nagoya University Short-Term Japanese Language Program	2018
SELECTED PUBLICATIONS	Languages. Mandarin Chinese (<i>native</i>), English (<i>fluent</i> , TOEFL 104), Japanese (<i>fluent</i> , JLPT N1)	
	Programming Languages. Python, C++, MATLAB, SQL, HTML	
	Library, Software, and Tools. PyTorch, OpenCV, ROS, Git, Latex, AutoCAD, Inventor	
SELECTED PUBLICATIONS	[1] Kuan-Wei Tseng* , 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) 🔗	
	[2] Kuan-Wei Tseng , 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. 🔗	
	[3] You-Yang Hu, Yao-Fu Jan, Kuan-Wei Tseng , 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) 🔗	
	[4] Yao-Chih Lee, Kuan-Wei Tseng , 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. 🔗	
	[5] Yu-Ta Chen, Kuan-Wei Tseng , 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. 🔗	
	[6] Yao-Fu Juan, Kuan-Wei Tseng , 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) 🔗	