

Fuwen TAN

CONTACT	fuwen.tan@gmail.com	https://fwtan.github.io/
SUMMARY	I am a researcher specializing in Efficient Machine Learning, with a focus lightweight model design, data-efficient representation learning, and on-device AI. My work aims to make ML more accessible and practical for real-world applications.	
RESEARCH	<p>MobileQuant: Mobile-friendly Quantization for On-device Language Models Fuwen Tan, Royson Lee, Lukasz Dudziak, Shell Xu Hu, Sourav Bhattacharya, Timothy Hospedales, Georgios Tzimiropoulos, Brais Martinez Conf. on Empirical Methods in Natural Language Processing, EMNLP Findings, 2024</p> <p>Effective Self-supervised Pre-training on Low-compute Networks without Distillation Fuwen Tan, Fatemeh Saleh, Brais Martinez International Conference on Learning Representations (ICLR), 2023</p> <p>iBoot: Image-bootstrapped Self-Supervised Video Representation Learning Fateme Saleh, Fuwen Tan, Adrian Bulat, Georgios Tzimiropoulos, Brais Martinez Arxiv, 2022</p> <p>EdgeViTs: Competing Light-weight CNNs on Mobile Devices with Vision Transformers Junting Pan, Adrian Bulat, Fuwen Tan, Xiatian Zhu, Lukasz Dudziak, Hongsheng Li, Georgios Tzimiropoulos, Brais Martinez European Conference on Computer Vision (ECCV), 2022</p> <p>Instance-level Image Retrieval using Reranking Transformers Fuwen Tan, Jiangbo Yuan, Vicente Ordonez International Conference on Computer Vision (ICCV), 2021</p> <p>Curriculum Labeling: Self-paced Pseudo-Labeling for Semi-Supervised Learning Paola Cascante-Bonilla, Fuwen Tan, Yanjun Qi, Vicente Ordonez AAAI Conference on Artificial Intelligence. (AAAI), 2021</p> <p>Drill-down: Interactive Retrieval of Complex Scenes using Natural Language Queries Fuwen Tan, Paola Cascante-Bonilla, Xiaoxiao Guo, Hui Wu, Song Feng, Vicente Ordonez Conf. on Neural Information Processing Systems (NeurIPS), 2019</p> <p>Text2Scene: Generating Compositional Scenes from Textual Descriptions Fuwen Tan, Song Feng, Vicente Ordonez Conf. on Computer Vision and Pattern Recognition (CVPR), 2019, Oral, Best Paper Finalist</p> <p>Where and Who? Automatic Semantic-Aware Person Composition Fuwen Tan, Crispin Bernier, Benjamin Cohen, Vicente Ordonez, Connelly Barnes Winter Conference on Applications of Computer Vision (WACV), 2018</p> <p>FaceCollage: A Rapidly Deployable System for Real-time Head Reconstruction for On-The-Go 3D Telepresence Fuwen Tan, Chi-Wing Fu, Teng Deng, Jianfei Cai, Tat Jen Cham ACM Multimedia (ACM MM, full paper), 2017</p> <p>High-Quality Kinect Depth Filtering For Real-time 3D Telepresence</p>	

Mengyao Zhao, **Fuwen Tan**, Chi-Wing Fu, Chi-Keung Tang, Jianfei Cai, Tat Jen Cham
Conf. on Multimedia and Expo (**ICME**), 2013

Field-Guided Registration for Feature-Conforming Shape Composition
Hui Huang, Minglun Gong, Daniel Cohen-Or, Yaobin Ouyang, **Fuwen Tan**, Hao Zhang
SIGGRAPH Asia, 2012

EDUCATION

University of Virginia Charlottesville, United States
Ph.D. in Computer Science Aug.2015 - May.2021
Advisor: Vicente Ordóñez Román

Zhejiang University Hangzhou, China
M.S.in Mathematics Sep.2010 - Jun.2012

Sun Yat-sen University Guangzhou, China
B.S. in Mathematics Sep.2006 - Jun.2010

EXPERIENCE

Samsung AI Center, Cambridge, United Kingdom June.2021 - Present
Researcher at the Future Interaction Team
R&D on Vision & Language, and on-device LLMs.

Nanyang Technological University, Singapore Aug.2012 - Jul.2015
Research Associate at the BeingThere Centre, Institute for Media Innovation
Design and implement a low-cost, fast and realistic system for personal 3D telepresence.

SERVICE

Reviewer / Program Committee
ICLR, ICML, ECCV, NeurIPS, EMNLP 2024
AAAI, ICLR, PAMI, ICCV, NeurIPS 2023
ICLR, CVPR, ICML ([Outstanding Reviewer](#)), ECCV, NeurIPS 2022
AAAI, ICLR, CVPR ([Outstanding Reviewer](#)), IJCAI, ICML, ICCV, NeurIPS 2021
AAAI, CVPR, ECCV ([Outstanding Reviewer](#)), NeurIPS 2020
ICCV 2019