

## Fuwen TAN

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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 <b>Fuwen Tan</b>, Royson Lee, Lukasz Dudziak, Shell Xu Hu, Sourav Bhattacharya, Timothy Hospedales, Georgios Tzimiropoulos, Brais Martinez Conf. on Empirical Methods in Natural Language Processing, <b>Findings of EMNLP</b>, 2024</p> <p>Effective Self-supervised Pre-training on Low-compute Networks without Distillation <b>Fuwen Tan</b>, Fatemeh Saleh, Brais Martinez International Conference on Learning Representations (<b>ICLR</b>), 2023</p> <p>iBoot: Image-bootstrapped Self-Supervised Video Representation Learning Fateme Saleh, <b>Fuwen Tan</b>, 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, <b>Fuwen Tan</b>, Xiatian Zhu, Lukasz Dudziak, Hongsheng Li, Georgios Tzimiropoulos, Brais Martinez European Conference on Computer Vision (<b>ECCV</b>), 2022</p> <p>Instance-level Image Retrieval using Reranking Transformers <b>Fuwen Tan</b>, Jiangbo Yuan, Vicente Ordonez International Conference on Computer Vision (<b>ICCV</b>), 2021</p> <p>Curriculum Labeling: Self-paced Pseudo-Labeling for Semi-Supervised Learning Paola Cascante-Bonilla, <b>Fuwen Tan</b>, Yanjun Qi, Vicente Ordonez AAAI Conference on Artificial Intelligence. (<b>AAAI</b>), 2021</p> <p>Drill-down: Interactive Retrieval of Complex Scenes using Natural Language Queries <b>Fuwen Tan</b>, Paola Cascante-Bonilla, Xiaoxiao Guo, Hui Wu, Song Feng, Vicente Ordonez Conf. on Neural Information Processing Systems (<b>NeurIPS</b>), 2019</p> <p>Text2Scene: Generating Compositional Scenes from Textual Descriptions <b>Fuwen Tan</b>, Song Feng, Vicente Ordonez Conf. on Computer Vision and Pattern Recognition (<b>CVPR</b>), 2019, <b>Oral</b>, <b>Best Paper Finalist</b></p> <p>Where and Who? Automatic Semantic-Aware Person Composition <b>Fuwen Tan</b>, Crispin Bernier, Benjamin Cohen, Vicente Ordonez, Connelly Barnes Winter Conference on Applications of Computer Vision (<b>WACV</b>), 2018</p> <p>FaceCollage: A Rapidly Deployable System for Real-time Head Reconstruction for On-The-Go 3D Telepresence <b>Fuwen Tan</b>, Chi-Wing Fu, Teng Deng, Jianfei Cai, Tat Jen Cham ACM Multimedia (<b>ACM MM</b>, <b>full paper</b>), 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