

## Fuwen TAN

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| CONTACT   | fuwen.tan@gmail.com  | <a href="https://fwtan.github.io/">https://fwtan.github.io/</a> |
| SUMMARY   | I am a Research Scientist in the Samsung AI Center, Cambridge (SAIC-Cambridge), working on Vision & Language, and on-device LLMs.  |   |
| EDUCATION | <b>University of Virginia</b><br>Ph.D. in Computer Science<br>Advisor: Vicente Ordóñez Román   | Charlottesville, United States<br>Aug.2015 - May.2021           |
|           | <b>Zhejiang University</b><br>M.S.in Mathematics   | Hangzhou, China<br>Sep.2010 - Jun.2012                          |
|           | <b>Sun Yat-sen University</b><br>B.S. in Mathematics   | Guangzhou, China<br>Sep.2006 - Jun.2010                         |
| RESEARCH  | <p>Effective Self-supervised Pre-training on Low-compute Networks without Distillation<br/><b>Fuwen Tan</b>, Fatemeh Saleh, Brais Martinez<br/>International Conference on Learning Representations (<b>ICLR</b>), 2023</p> <p>iBoot: Image-bootstrapped Self-Supervised Video Representation Learning<br/>Fateme Saleh, <b>Fuwen Tan</b>, Adrian Bulat, Georgios Tzimiropoulos, Brais Martinez<br/>2022</p> <p>EdgeViTs: Competing Light-weight CNNs on Mobile Devices with Vision Transformers<br/>Junting Pan, Adrian Bulat, <b>Fuwen Tan</b>, Xiatian Zhu, Lukasz Dudziak, Hongsheng Li, Georgios Tzimiropoulos, Brais Martinez<br/>European Conference on Computer Vision (<b>ECCV</b>), 2022</p> <p>Instance-level Image Retrieval using Reranking Transformers<br/><b>Fuwen Tan</b>, Jiangbo Yuan, Vicente Ordonez<br/>International Conference on Computer Vision (<b>ICCV</b>), 2021</p> <p>Curriculum Labeling: Self-paced Pseudo-Labeling for Semi-Supervised Learning<br/>Paola Cascante-Bonilla, <b>Fuwen Tan</b>, Yanjun Qi, Vicente Ordonez<br/>AAAI Conference on Artificial Intelligence. (<b>AAAI</b>), 2021</p> <p>Drill-down: Interactive Retrieval of Complex Scenes using Natural Language Queries<br/><b>Fuwen Tan</b>, Paola Cascante-Bonilla, Xiaoxiao Guo, Hui Wu, Song Feng, Vicente Ordonez<br/>Conf. on Neural Information Processing Systems (<b>NeurIPS</b>), 2019</p> <p>Text2Scene: Generating Compositional Scenes from Textual Descriptions<br/><b>Fuwen Tan</b>, Song Feng, Vicente Ordonez<br/>Conf. on Computer Vision and Pattern Recognition (<b>CVPR</b>), 2019, <b>Oral, Best Paper Finalist</b></p> <p>Where and Who? Automatic Semantic-Aware Person Composition<br/><b>Fuwen Tan</b>, Crispin Bernier, Benjamin Cohen, Vicente Ordonez, Connelly Barnes<br/>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</p> |   |

Telepresence

**Fuwen Tan**, Chi-Wing Fu, Teng Deng, Jianfei Cai, Tat Jen Cham  
ACM Multimedia (**ACM MM**, **full paper**), 2017

High-Quality Kinect Depth Filtering For Real-time 3D Telepresence

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

## 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.

Deploy LLMs on mobile devices (e.g. TinyLlama-1.1B on S23 HTP with 12 tok/s and near-lossless performance).

**Adobe Research, College Park, United States**

June.2019 - Aug.2019

*Machine learning intern at the Document Intelligence Lab*

Research on structured representations for multimodal document analysis.

**Amazon A9, Palo Alto, United States**

May.2018 - Aug.2018

*Applied scientist intern at the Visual Search & AR team*

Design and implement a working solution for an improved image segmentation approach for the creation of AR models.

**Honda Research Institute, Mountain View, United States**

May.2016 - Aug.2016

*Research intern in the Perception Group*

Research on applications of Deep Learning to traffic participant detection.

**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

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