Fuwen TAN

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https://fwtan.github.io/

SUMMARY

I'm a researcher in Efficient Machine Learning, working on making LLM and Video Diffusion Models faster.

Publication

Progressive Mixed-Precision Decoding for Efficient LLM Inference

Hao Mark Chen, **Fuwen Tan**, Alexandros Kouris, Royson Lee, Hongxiang Fan, Stylianos I. Venieris International Conference on Learning Representations (**ICLR**), 2025

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

Effective Self-supervised Pre-training on Low-compute Networks without Distillation **Fuwen Tan.** Fatemen Saleh, Brais Martinez

International Conference on Learning Representations (ICLR), 2023

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

Instance-level Image Retrieval using Reranking Transformers

Fuwen Tan, Jiangbo Yuan, Vicente Ordonez

International Conference on Computer Vision (ICCV), 2021

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

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

Text2Scene: Generating Compositional Scenes from Textual Descriptions

Fuwen Tan, Song Feng, Vicente Ordonez

Conf. on Computer Vision and Pattern Recognition (CVPR), 2019, Oral presentation Best Paper Finalist

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

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

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

EDUCATION

University of Virginia
Ph.D. in Computer Science

Charlottesville, United States Aug.2015 - May.2021

Zhejiang University M.S.in Mathematics

Hangzhou, China Sep.2010 - Jun.2012

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

EXPERIENCE

Bytedance, United States
R&D in Efficient Machine Learning

Jan., 2025 - Present

Samsung AI Center, Cambridge, United Kingdom

Jun., 2021 - Jan., 2025

R&D in Efficient Machine Learning

Nanyang Technological University, Singapore

Aug.2012 - Jul.2015

R & D in 3D Telepresence

Talks

Toward Efficient On-device AI: the Model, the Training, and the Deployment University of Surrey, November 2024

SERVICE

Program Committee

Siggraph Asia 2024 (Technical Communications & Posters)

Reviewer

Computer Vision: CVPR (Outstanding Reviewer), ECCV(Outstanding Reviewer), ICCV, PAMI

Machine Learning: ICML(Outstanding Reviewer), NeurIPS, ICLR, AAAI, IJCAI

Natural Language Processing: EMNLP

Awards

Computer Vision and Pattern Recognition (CVPR) Best Paper Finalist	2019
European Conference on Computer Vision (ECCV) Outstanding Reviewer	2020
Computer Vision and Pattern Recognition (CVPR) Outstanding Reviewer	2021
International Conference on Machine Learning (ICML) Outstanding Reviewer	2022