Fuwen TAN

CONTACT fuwen.tan@gmail.com

https://fwtan.github.io/

Aug.2015 - May.2021

Summary I am a Researcher in the Samsung AI Center, Cambridge (SAIC-Cambridge), working on Vision,

Language, and Learning.

EDUCATION University of Virginia Charlottesville, United States

Ph.D. in Computer Science

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

RESEARCH 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, 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

 ${\it Face Collage:}\ A\ {\it Rapidly\ Deployable\ System\ for\ Real-time\ Head\ Reconstruction\ for\ On-The-Go\ 3D$

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

 $\mathbf{SIGGRAPH}$ Asia, 2012

EXPERIENCE

Samsung AI Center, Cambridge, United Kingdom

June.2021 - Present

Researcher at the Future Interaction Team

Produce high-impact research targeting the top Computer Vision and Machine Learning venues. Help transfer the research outcomes into specific Samsung products.

Adobe Research, College Park, United States

June.2019 - Aug.2019

Machine learning intern at the Document Intelligence Lab Research on structured analysis for multimodal documents.

Amazon A9, Palo Alto, United States

May.2018 - Aug.2018

Applied scientist intern at the Visual Search $\ensuremath{\mathfrak{C}}$ 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.

INVITED TALKS

Learning Compositional Representation of Images and Text

Samsung Research America, November 2019

Instance Image Recognition using Reranking Transformers

eBay Research, January 2021

Learning Local Representation of Images and Text for Rich Visual Prediction

Bytedance AI Lab, January 2021

Samsung AI Center, Cambridge, March 2021

SERVICE

Reviewer / Program Committee

ICLR, CVPR	2022
AAAI, ICLR, CVPR (Outstanding Reviewer), IJCAI, ICML, ICCV, NeurIPS	2021
AAAI, CVPR, ECCV (Outstanding Reviewer), NeurIPS	2020
ICCV	2019