Fuwen TAN

CONTACT

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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 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

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

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

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