

## Fuwen TAN

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SUMMARY	I am a Ph.D. student in the Computer Science Department of University of Virginia (U.Va.), working with Dr. Vicente Ordóñez Román on Vision and Language. I am interested in learning compositional representations of images and text, and their applications to visual recognition, retrieval, and synthesis.	
EDUCATION	<b>University of Virginia</b> Ph.D. Program in Computer Science Advisor: Vicente Ordóñez Román	Charlottesville, United States Aug.2015 - Present
	<b>Zhejiang University</b> M.S.in Mathematics Advisor: Ligang Liu	Hangzhou, China Sep.2010 - Jun.2012
	<b>Sun Yat-sen University</b> B.S. in Mathematics	Guangzhou, China Sep.2006 - Jun.2010
RESEARCH	Instance-level Image Retrieval using Reranking Transformers <b>Fuwen Tan</b> , Jiangbo Yuan, Vicente Ordonez Arxiv:2103.12236, 2021	
	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	
	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	
	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>	
	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	
	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	
	High-Quality Kinect Depth Filtering For Real-time 3D Telepresence Mengyao Zhao, <b>Fuwen Tan</b> , Chi-Wing Fu, Chi-Keung Tang, Jianfei Cai, Tat Jen Cham Conf. on Multimedia and Expo ( <b>ICME</b> ), 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

**Adobe Research, College Park, United States** June.2019 - Aug.2019

*Machine learning intern in Document Intelligence Labs*  
Research on structured analysis for multimodal documents.  
Manager: Tong Sun; Mentor: Vlad Morariu

**Amazon A9, Palo Alto, United States** May.2018 - Aug.2018

*Applied scientist intern in Visual Search & AR team*  
Design and implement a working solution for an improved image segmentation approach for the creation of AR models.  
Manager: Sundar Vedular; Mentor: Tony Hwang

**Honda Research Institute, Mountain View, United States** May.2016 - Aug.2016

*Research intern in Perception Group*  
Research on applications of Deep Learning to traffic participant detection.  
Manager: Bernd Heisele

**Nanyang Technological University, Singapore** Aug.2012 - Jul.2015

*Research Associate at BeingThere Centre, Institute for Media Innovation*  
Design and implement a low-cost, fast and realistic system for personal 3D telepresence.  
Manager: Chi-Wing Fu

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*

TEACHING

**Teaching Assistant**

*CS1113 (Programming), CS2150 (Data Structure)* Aug.2015 - Dec.2015  
*CS4457 (Computer Networks), CS4810 (Computer Graphics)* Jan.2016 - May.2016  
*CS6501 (Computational Visual Recognition)* Aug.2016 - Dec.2016

SERVICE

**Reviewer / Program Committee**

AAAI, ICLR, CVPR, IJCAI, ICML, ICCV 2021  
AAAI, CVPR, ECCV ([Outstanding Reviewer](#)), NeurIPS, WACV 2020  
ICCV 2019

REFERENCES

**Vicente Ordóñez Román**

Assistant Professor, University of Virginia  
▷ [vicente@virginia.edu](mailto:vicente@virginia.edu)

**Connelly Barnes**

Senior Research Scientist, Adobe Research

▷ [cbarnes@adobe.com](mailto:cbarnes@adobe.com)

**Song Feng**

Research Staff Member, IBM Research Watson

▷ [sfeng@us.ibm.com](mailto:sfeng@us.ibm.com)