# **ZHENYU TANG**

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#### **EDUCATION**

#### **University of Maryland - College Park**

PhD in Computer Science, supervised by **Dinesh Manocha** 

College Park, MD, USA Aug. 2018 – Present (2022 expected)

**Zhejiang University** (Chu Kochen Honors College)

Bachelor in Engineering (with Honor), Opto-Electronic Science and Engineering

Cumulative GPA: 3.73/4.0, Major GPA: 3.83/4.0 (top 5%)

## Hangzhou, Zhejiang, China Sept. 2013 – Jul. 2017

## **RESEARCH INTERESTS**

Computer graphics, Audio-visual system, Virtual/Augmented reality, Machine intelligence, Speech technology

#### **WORK EXPERIENCE**

Adobe Systems Seattle, WA

Creative Intelligence Lab Intern in Audio Group

May 2019 – Aug. 2019

- Devised new user-friendly methods for synthesizing virtual sound that is consistent with real-world sound
- Submitted a research paper and filed a patent for our original algorithm
- Integrated our learning-based acoustic analyzer onto Adobe's Sensei cloud machine learning framework

#### **PUBLICATIONS**

#### Scene-Aware Audio Rendering via Deep Acoustic Analysis

Zhenyu Tang, Nicholas J. Bryan, Dingzeyu Li, Timothy R. Langlois, Dinesh Manocha

Nov. 2019

 $Contidionally\ accepted\ to\ IEEE\ VR\ 2020\ Journal\ (TVCG)\ track$ 

## Regression and Classification for Direction-of-Arrival Estimation with

Convolutional Recurrent Neural Networks

Zhenyu Tang, John D. Kanu, Kevin Hogan, Dinesh Manocha

Sept. 2019

Proceedings of INTERSPEECH 2019

Receiver placement for speech enhancement using sound propagation optimization

Nicolas Morales, **Zhenyu Tang**, Dinesh Manocha

Dec. 2019

Applied Acoustics Volume 155, Pages 53-62

Dynamic Sound Field Synthesis for Speech and Music Optimization

Zhenyu Tang, Nicolas Morales, Dinesh Manocha

Oct. 2018

Proceedings of the 2018 ACM on Multimedia Conference. ACM, 2018

Noise Field Control using Active Sound Propagation and Optimization

Zhenyu Tang, Dinesh Manocha

Sept. 2018

Acoustic Signal Enhancement (IWAENC), 2018 IEEE International Workshop on. IEEE, 2018

LightPainter: Creating Long Exposure Imagery from Videos

Yi-Ling Chen, **Zhenyu Tang**, Kwan-Liu Ma

Jul. 2018

*IEEE computer graphics and applications* 38, no. 4 (2018)

HeadPager: Page Turning with Computer Vision based Head Interaction

Zhenyu Tang, Chenyu Yan, Sijie Ren, Huagen Wan

Sept. 2016

13th Asian Conference on Computer Vision (ACCV'16)

#### **MANUSCRIPTS**

Low-frequency Compensated Synthetic Impulse Responses for Improved Far-field Speech Recognition

Zhenyu Tang, Hsien-Yu Meng, Dinesh Manocha
Oct. 2019

<a href="https://arxiv.org/abs/1910.10815">https://arxiv.org/abs/1910.10815</a>

Improving Reverberant Speech Training Using Diffuse Acoustic Simulation Zhenyu Tang, Lianwu Chen, Bo Wu, Dong Yu, Dinesh Manocha <a href="https://arxiv.org/abs/1907.03988">https://arxiv.org/abs/1907.03988</a>

July. 2019

### **TECHNICAL STRENGTHS**

- **Programming:** C/C++, Python, Matlab, R, bash scripting
- Software and Tools: Pytorch/tensorflow, Kaldi, Blender, Qt
- Miscellaneous:, LaTex, parallel computing, OpenGL/CV, GLSL