

# ZHENYU TANG

Greenbelt, MD 20770 ♦ zhy@cs.umd.edu ♦ (404) 200-4217 ♦ <http://www.cs.umd.edu/~zhy>

## 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**

*Creative Intelligence Lab Intern in Audio Group*

Seattle, WA

May 2019 – Aug. 2019

- Devised new methods for synthesizing virtual sound that blends with real-world sound in augmented reality
- Submitted a research paper and a patent application for our original algorithm
- Integrated our learning-based acoustic analyzer onto Adobe's Sensei cloud machine learning framework

## PUBLICATIONS

### ***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

<https://arxiv.org/abs/1910.10815>

***Improving Reverberant Speech Training Using Diffuse Acoustic Simulation***

**Zhenyu Tang**, Lianwu Chen, Bo Wu, Dong Yu, Dinesh Manocha

July. 2019

<https://arxiv.org/abs/1907.03988>

**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