ZHENYU TANG

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EDUCATION

University of Maryland - College Park

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

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

Cumulative GPA: 3.8/4.0

Hangzhou, Zhejiang, China

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

Sept. 2013 – Jul. 2017

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

Zhejiang University (Chu Kochen Honors College)

RESEARCH INTERESTS

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

WORK EXPERIENCE

Facebook Reality Labs

Research Intern in Audio Team

Seattle, WA

May 2020 – Oct. 2020

Adobe Systems Seattle, WA

Creative Intelligence Lab Intern in Audio Group May 2019 – Sept. 2019

PUBLICATIONS

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

Zhenyu Tang, Hsien-Yu Meng, Dinesh Manocha

Jan. 2020

International Conference on Acoustics, Speech, and Signal Processing (ICASSP) 2020

Improving Reverberant Speech Training using Diffuse Acoustic Simulation

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

Jan. 2020

International Conference on Acoustics, Speech, and Signal Processing (ICASSP) 2020

Scene-Aware Audio Rendering via Deep Acoustic Analysis

Zhenyu Tang, Nicholas J. Bryan, Dingzeyu Li, Timothy R. Langlois, Dinesh Manocha Nov. 2019

IEEE VR 2020 Journal, Transactions on Visualization and Computer Graphics (TVCG)

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

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

Jul. 2018

HeadPager: Page Turning with Computer Vision based Head Interaction

Zhenyu Tang, Chenyu Yan, Sijie Ren, Huagen Wan

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

Sept. 2016

MANUSCRIPTS

Learning Acoustic Scattering Fields for Highly Dynamic Interactive Sound Propagation Zhenyu Tang, Hsien-Yu Meng, Dinesh Manocha arXiv:2010.04865

IR-GAN: Room Impulse Response Generator for Speech Augmentation

Anton Ratnarajah, **Zhenyu Tang**, Dinesh Manocha arXiv:2010.13219

ACADEMIC SERVICES

I served as a reviewer for

- The IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR) 2020 and 2021
- Acta Acustica Journal 2020
- IEEE Transactions on Multimedia 2020
- Journal of the Acoustical Society of America (JASA) 2020

PATENTS

Rendering Scene-Aware Audio Using Neural Network-Based Acoustic Analysis
Patent Filed. 2019

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

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