ZHENYU TANG

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EDUCATION

University of Maryland - College Park   College Park, MD, USA
PhD in Computer Science, supervised by **Dinesh Manocha**   Aug. 2018 – Present (2022 expected)

Zhejiang University (Chu Kochen Honors College)   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%)

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
Conditionally 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
https://arxiv.org/abs/1910.10815

Improving Reverberant Speech Training Using Diffuse Acoustic Simulation
Zhenyu Tang, Lianwu Chen, Bo Wu, Dong Yu, Dinesh Manocha   Jul. 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