

ZHENYU TANG

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EDUCATION

University of Maryland - College Park

PhD in Computer Science, supervised by **Dinesh Manocha**
Cumulative GPA: 3.8/4.0

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 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
Conditionally accepted to IEEE VR 2020 Journal (TVCG) track

Nov. 2019

Regression and Classification for Direction-of-Arrival Estimation with Convolutional Recurrent Neural Networks

Zhenyu Tang, John D. Kanu, Kevin Hogan, Dinesh Manocha
Proceedings of INTERSPEECH 2019

Sept. 2019

Receiver Placement for Speech Enhancement using Sound Propagation Optimization

Nicolas Morales, **Zhenyu Tang**, Dinesh Manocha
Applied Acoustics Volume 155, Pages 53-62

Dec. 2019

Dynamic Sound Field Synthesis for Speech and Music Optimization

Zhenyu Tang, Nicolas Morales, Dinesh Manocha
Proceedings of the 2018 ACM on Multimedia Conference. ACM, 2018

Oct. 2018

Noise Field Control using Active Sound Propagation and Optimization

Zhenyu Tang, Dinesh Manocha
Acoustic Signal Enhancement (IWAENC), 2018 IEEE International Workshop on. IEEE, 2018

Sept. 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

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>

PATENTS

Rendering Scene-Aware Audio Using Neural Network-Based Acoustic Analysis

Patent Filed (Pending), 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