
FENGYUAN ZHU

Portfolio Website : itpzhu.com

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Education

New York University

- M.P.S in ITP, NYU, 2015 - 2017

Peking University

- Bachelor of Science, School of Physics, 2011-2015
 - GPA: 3.7/4.0 in Physics, Mathematics and Computational courses, top 10%
- Bachelor of Fine Arts (Dual Degree), School of Art, 2012-2015
 - GPA: 3.7/4.0 in Art Theory, Film Direction and Fine Arts

Experience

Research Scientist, NYU Future Reality Research Lab 2016.06-now

- Conducting Research Projects for Advanced VR/AR experience, in the aspects like combining physical surroundings, supporting multiplayer and provide haptic feedbacks.

Cofounder, Head of R&D, Holojam Inc, 2016.09-now

- Designing a low latency Multi-Person system, and provide a spectators for the audiences for co-located usage in Mixed Reality

Codirector, Holokit, 2017.01-now

- Designing an open-source system to turn mobile phone into Mixed Reality Device like hololens , as the Co-Director who leads for all Applications and Hardware design, as Non-profit work

Research Assistant, X-studio, Tsinghua University 2014-2015

- Conducting Research Projects Actuated TUI: Theory and Key Technologies, Exploring the conceptual framework of actuated TUI

Projects with social impacts:

Holokit: reported by Techcrunch, Gizmodo,

demoed on SIGGRAPH 2017, AWE 2017:

<https://holokit.io/>

Holojam: reported by NYTimes, VICE News, related works in SIGGRAPH 2017, FOST 2016

<https://holojamvr.com/>

Homemade Robotic Hand: Exhibited in ITP

Winter Show 2015, reported by **Forbes Tech**

Patent

- New HMD Designs for AR/MR usage
(37 C.F.R. Section 3.21) U.S. provisional application serial number 62/358,875, filed July 6, 2016

Publication and Exhibition

- **Zhu, F.**, Fang, K., & Ma, X. (2017, May). Exploring the Effects of Strategy and Arousal of Cueing in Computer-Human Persuasion. In *Proceedings of the 2017 CHI Conference Extended Abstracts on Human Factors in Computing Systems* (pp. 2276-2283). ACM.
- He, Z., **Zhu, F.**, Gaudette, A., & Perlin, K. (2017). Robotic Haptic Proxies for Collaborative Virtual Reality. arXiv preprint arXiv:1701.08879, accepted by 2017 UIST Conference . ACM
- Li, P., Tong, Q., Hu, B., **Zhu, F.**, & Shen, J., (2017, October) "Monocular visual-inertial state estimation for mobile augmented reality" accepted by the IEEE International Symposium on Mixed and Augmented Reality (ISMAR).
- He, Z., **Zhu, F.**, & Perlin, K. (2017). Chalktalk VR/AR. Accepted by 1st Workshop on Artificial Intelligence Meets Virtual and Augmented Realities (AI-VR) in conjunction with SIGGRAPH Asia 2017.
- **Zhu, F.**, Sun, W., Zhang, C., & Ricks, R. (2016, May). BoomChaCha: A Rhythm-based, Physical Role-Playing Game that Facilitates Cooperation among Players. In *Proceedings of the 2016 CHI Conference Extended Abstracts on Human Factors in Computing Systems* (pp. 184-187). ACM.
- Ma, X., Fang, K., & **Zhu, F.** (2016, June). From Breakage to Icebreaker: Inspiration for Designing Technological Support for Human-Human Interaction. In *Proceedings of the 2016 ACM Conference on Designing Interactive Systems* (pp. 403-414). ACM.

Thesis Project:

Magic Window Mixed Reality System

<https://itp.nyu.edu/thesis2017/project/fengyuan-zhu>

Special Training Sessions:

- **SteamVR tracking training, Seattle, 2016.10**
 - Full stack capability to use SteamVR Tracking HDK to design any hardware for Lighthouse tracking system.
- **Google Tango + Creative training, 2016.10 (Team LOMEX, before the official release of Tango Phone)**

Skills

Software:

Unity with C#, Unreal, Processing in Java, Javascript with WebGL

Hardware:

Vive Lighthouse tracking system, RF modules for Mesh Networks, Myo, Kinect, Microsoft PixelSense, Arduino, Raspberry Pi, GPIO&I2C Sensors.

Digital Fabrication design skills:

Eagle PCB design, Solidworks, Vectorworks

Fabrication skills:

PCB CNC Router, Laser Cut, 3-D printing, PCB, OtherMill
