Shan-Yuan Teng

Chicago, Illinois, United States
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I am an HCI (Human-Computer Interaction) researcher who explores future interactions by inventing novel hardware.

Education

June 2019 - current
Ph.D. student, Department of Computer Science
University of Chicago, Chicago, Illinois, United States
Human Computer Integration Lab
Advisor: Prof. Pedro Lopes

Sept. 2016 - June 2018
M.S., Graduate Institute of Networking and Multimedia
National Taiwan University, Taipei, Taiwan
Communications and Multimedia Lab
Advisor: Prof. Bing-Yu Chen
Thesis: Design of Shape-changing Haptic Interfaces Using Pneumatic Actuation for Virtual Reality

Sept. 2012 - June 2016
B.S., Department of Electrical Engineering
National Taiwan University, Taipei, Taiwan

Work

Aug. 2018 - May 2019
Research Assistant, IoX Center
National Taiwan University, Taipei, Taiwan

Publications

2019 **Shan-Yuan Teng**, Cheng-Lung Lin, Chi-huan Chiang, Tzu-Sheng Kuo, Liwei Chan, Da-Yuan Huang, Bing-Yu Chen
TilePoP: Tile-type Pop-up Prop for Virtual Reality.
UIST 2019 Paper
🏅 **Honorable Mention Award**

2019 **Shan-Yuan Teng**, Da-Yuan Huang, Chi Wang, Teddy Seyed, Jun Gong, Xing-Dong Yang, Bing-Yu Chen
Aarnio: Passive Kinesthetic Force Output for Foreground Interactions on an Interactive Chair.
CHI 2019 Paper

2018 **Shan-Yuan Teng**, Tzu-Sheng Kuo, Chi Wang, Chi-huan Chiang, Da-Yuan Huang, Liwei Chan, Bing-Yu Chen.
PuPoP: Pop-up Prop on Palm for Virtual Reality.
UIST 2018 Paper

2017 Yung-Ta Lin, Yi-Chi Liao, **Shan-Yuan Teng**, Yi-Ju Chung, Liwei Chan, Bing-Yu Chen.
Outside-In: Visualizing Out-of-Sight Regions-of-Interest in a 360 Video Using Spatial Picture-in-Picture Previews.
UIST 2017 Paper

2016 Long-Fei Lin, **Shan-Yuan Teng**, Rong-Hao Liang, Bing-Yu Chen.
Stylus Assistant: Designing Dynamic Constraints for Facilitating Stylus Inputs on Portable Displays.
SIGGRAPH ASIA 2016 Emerging Technologies

Student Research Projects

2017 **Shan-Yuan Teng**, Mu-Hsuan Chen, Yung-Ta Lin.
Way Out: A Multi-Layer Panorama Mobile Game Using Around-Body Interactions.
CHI 2017 Student Game Competition

2016 **Shan-Yuan Teng**, Yung-Ta Lin, Yi-Chi Liao.
Robin Hood: Introducing the first real air guitar.
UIST 2016 Student Innovation Contest
🏆 **Best Implementation Award**

Languages

English, Chinese (native)

Software Skills

Advanced Unity 3D (C#), C++, Python, Processing, Bash

Intermediate Web Front-end (HTML, CSS, JavaScript)
Adobe Illustrator/Photoshop/Premiere Pro

Hardware Skills

Advanced Prototyping using Arduino with various sensors and actuators
3D Printing
Laser Cutting

Research Interests

Human-Computer Interaction (HCI), Haptic Interface, Tangible Interaction, Shape-changing Interface, Digital Fabrication, Robotics, VR/AR