Shan-Yuan Teng

PhD student at University of Chicago, Illinois, United States
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research interests

human-computer interaction (HCI), haptics, virtual/augmented reality (VR/AR)

education

June 2019 - current	PhD student, Department of Computer Science University of Chicago, Chicago, Illinois, United States advisor: Prof. Pedro Lopes
Sept. 2016 - June 2018	MS, Graduate Institute of Networking and Multimedia National Taiwan University, Taipei, Taiwan advisor: Prof. Bing-Yu Chen
Sept. 2012 - June 2016	BS, Department of Electrical Engineering National Taiwan University, Taipei, Taiwan

work

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

publications

UIST 2021 Paper	Yujie Tao, **Shan-Yuan Teng**, Pedro Lopes. **Altering perceived softness of real rigid objects by restricting fingerpad deformation.** 🏆 *Best Paper Award* 🏆 *Best Demo Award*
UIST 2021 Paper	Romain Nith, **Shan-Yuan Teng**, Pengyu Li, Yujie Tao, Pedro Lopes. **DextrEMS: increasing dexterity in electrical muscle stimulation by combining it with brakes.** 🏆 *Best Demo People's Choice Award*
CHI 2021 Paper	**Shan-Yuan Teng**, Pengyu Li, Romain Nith, Joshua Fonseca, Pedro Lopes. **Touch&Fold: a foldable haptic actuator for rendering touch in mixed reality.** 🏅 *Best Paper Honorable Mention Award*
CHI 2021 Paper	Alex Mazursky, **Shan-Yuan Teng**, Romain Nith, Pedro Lopes. **MagnetIO: passive yet interactive soft haptic patches anywhere.**
CHI 2021Paper	Jas Brooks, **Shan-Yuan Teng**, Jingxuan Wen, Romain Nith, Jun Nishida, Pedro Lopes. **Stereo-smell via electrical trigeminal stimulation.**
Science Advances	Qi Su, Q. Zou, Yang Li, Yuzhen Chen, **Shan-Yuan Teng**, Jane Tunde Kelleher, Romain Nith, Ping Cheng, Nan Li, Wei Liu, Shilei Dai, Youdi Liu, Alex Mazursky, Jie Xu, Lihua Jin, Pedro Lopes, Sihong Wang. **A stretchable and strain-unperturbed pressure sensor for motion-interference-free tactile monitoring on skins.**
UIST 2020 Paper	Jun Nishida, Soichiro Matsuda, Hiroshi Matsui, **Shan-Yuan Teng**, Ziwei Liu, Kenji Suzuki, Pedro Lopes. **HandMorph: a passive exoskeleton that miniaturizes grasp.** 🏆 *Best Paper Award*

CHI 2020 Paper — Yuxin Chen*, Huiying Li*, **Shan-Yuan Teng***, Steven Nagels, Zhijing Li, Pedro Lopes, Ben Y. Zhao, Haitao Zheng. (*equal contribution)
Wearable microphone jamming.
Best Paper Honorable Mention Award

UIST 2019 Paper — **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.
Best Paper Honorable Mention Award
Best Talk Honorable Mention Award

CHI 2019 Paper — **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.

UIST 2018 Paper — **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 2017 Paper — 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.

demonstrations

SIGGRAPH 2021 Emerging Technologies — **Shan-Yuan Teng**, Pengyu Li, Romain Nith, Joshua Fonseca, Pedro Lopes.
Demonstrating Touch&Fold: a foldable haptic actuator for rendering touch in mixed reality.

SIGGRAPH 2021 Emerging Technologies — Alex Mazursky, **Shan-Yuan Teng**, Romain Nith, Pedro Lopes.
Demonstrating MagnetIO: passive yet interactive soft haptic patches anywhere.

SIGGRAPH ASIA 2016 Emerging Technologies — Long-Fei Lin, **Shan-Yuan Teng**, Rong-Hao Liang, Bing-Yu Chen.
Stylus Assistant: designing dynamic constraints for facilitating stylus inputs on portable displays.

student research projects

CHI 2017 Student Game Competition — **Shan-Yuan Teng**, Mu-Hsuan Chen, Yung-Ta Lin
Way Out: a multi-layer panorama mobile game using around-body interactions.

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

professional services

teaching assistant at the University of Chicago for
Introduction to Human-Computer Interaction (CMSC 20300), Fall 2019
Emerging Interface Technologies (CMSC 33240/CMSC 23240), Winter 2020
Engineering Interactive Electronics onto Printed Circuit Boards (CMSC 23230/CMSC 33230), Spring 2021
reviewer for ACM CHI 2020/2021/2022, UIST 2020, TEI 2020/2021, IEEE VR 2020, AH 2020
demo co-chair for AugementedHumans 2021

languages

English, Mandarin

skills

programming (C, Python, web)
electronic circuits (PCB)
digital fabrication (CAD, 3D printing, laser cutting)