Parinya Punpongsanon

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MIT CSAIL, 32 Vassar St. 32-208, Cambridge, MA 02139

Employment

Postdoctoral Associate, *Massachusetts Institute of Technology* 01/2017 - Present
Human-Computer Interaction Engineering (HCIE) Group
Computer Science and Artificial Intelligence Laboratory (CSAIL)
Under advisory of *Prof. Stefanie Mueller*

Postdoctoral Fellow, *Osaka University* 10/2016 - Present
Intelligence Sensing Group
Graduate School of Engineering Science
Sponsors by Japan Society for the Promotion of Science (JSPS)
Under advisory of *Prof. Kosuke Sato*

Education

Ph.D. in Engineering, *Osaka University, Japan* September 2016
System Innovation, Graduate School of Engineering Science,
Under advisory of *Prof. Kosuke Sato* and *Prof. Daisuke Iwai*

Bachelor of Science, *King Mongkut's University of Technology, Thailand* April 2010
School of Computer Science and Information Technology,
MAJOR GPA: 3.63/4.00 (First Class Honor)

Experience

Visiting Researcher, *Telecom ParisTech (Universite Paris-Saclay)* 12/2013 - 02/2014
Computer Graphics Group
Collaborated under project 'Lazy 3D Navigation using Non-Critical Body Interaction'
Under advisory of *Prof. Tamy Boubekeur*

Exchange Student, *Fukui University* 10/2008 - 09/2009
Human and Computational Intelligence System Laboratory
School of Engineer
Sponsors by Japan Society for the Promotion of Science (JSPS)
Under advisory of *Prof. Yasuhiro Ogoshi*

Grants and Awards

Best Student Paper, *IEEE Kansai Section* 2017
Best Student Volunteer, *ACM UIST 2016* 2016
Grant, *JSPS Research Fellow* 2016
Best Paper, *IEEE 3DUI 2015* 2015
Best Student Volunteer, *ACM SIGGRAPH Asia 2014* 2014
Best Presentation, *Korea-Japan Workshop on Mixed Reality 2013* 2013
Grant, *MEXT Scholarship (Oct. 2011 - Sep. 2016)* 2011
1^{st} **Class Honor, *King Mongkut's University of Technology Thonburi*** 2010

Skills

Software Python, C/ C++ , HTML/CSS/Javascript, MATLAB, OpenCV
Hardware Projector-Camera system, Laser Cutter, 3D Printer

Selected Publication

JOURNALS

1. Parinya Punpongsanon, Emilie Guy, Daisuke Iwai, Kosuke Sato, and Tamy Boubekeur. 'Extended LazyNav: Virtual 3D Ground Navigation for Large Displays and Head-Mounted Displays', *IEEE Transactions on Visualization and Computer Graphics*, Vol. 23, No. 8, pp. 1952-1963. August 2017.

2. Parinya Punpongsanon, Daisuke Iwai, and Kosuke Sato. 'SoftAR: Visually Manipulating Haptic Softness Perception in Spatial Augmented Reality', *IEEE Transactions on Visualization and Computer Graphics*, Vol. 21, No. 11, pp. 1279-1288. November 2016.

3. Parinya Punpongsanon, Daisuke Iwai, and Kosuke Sato. 'Projection-based Visualization of Tangential Deformation of Nonrigid Surface by Deformation Estimation Using Infrared Texture', *Springer: Virtual Reality*, Vol. 19, No. 1, pp. 45-56. March 2015.

CONFERENCE PAPERS AND NOTES

1. Emilie Guy, Parinya Punpongsanon, Daisuke Iwai, Kosuke Sato, and Tamy Boubekeur. 'LazyNav: 3D Ground Navigation with Non-Critical Body Parts', *In Proceedings of IEEE Symposium on 3D User Interfaces (3DUI)*, pp. 43-50, 2015.

2. Parinya Punpongsanon, Emilie Guy, Tamy Boubekeur, Daisuke Iwai, and Kosuke Sato. 'Ground Navigation in 3D Scene using Simple Body Motions', *In Proceedings of International Conference on Artificial Reality and Telexistence and Eurographics Symposium on Virtual Environments (ICAT-EGVE)*, pp. 19-20, 2014.

3. Parinya Punpongsanon, Daisuke Iwai, and Kosuke Sato. 'SoftAR: Visually Manipulating Haptic Softness Perception in Spatial Augmented Reality', *In Proceedings of IEEE Symposium on Mixed and Augmented Reality (ISMAR)*, pp. 1279-1288, 2016.

4. Parinya Punpongsanon, Daisuke Iwai, and Kosuke Sato. 'A Preliminary Study on Altering Surface Softness Perception using Augmented Color and Deformation', *In Proceedings of IEEE Symposium on Mixed and Augmented Reality (ISMAR)*, pp. 301-032, 2014.

5. Parinya Punpongsanon, Daisuke Iwai, and Kosuke Sato. 'DeforMe: Projection-based Visualization of Deformable Surfaces using Invisible Textures', *In Proceedings of ACM SIGGRAPH Asia (Emerging Technologies)*, Article 8, 2013.

6. Parinya Punpongsanon, Daisuke Iwai, and Kosuke Sato. 'Infrared-based Tangential Deformation Estimation Technique', *In Proceedings of the* 6^{th} *Thailand-Japan International Academic Conference (TJIA)*, Article 3, 2013.

Invited Talks

University of Tokyo, Japan 2016
'Projection-based Mixed Reality for Deformable Objects'

The 19^{th} **Meeting on Image Recognition and Understanding (MIRU 2016), Japan** 2016
'SoftAR: Visually Manipulating Haptic Softness Perception in Spatial Augmented Reality'

IEEE TVCG VR/AR Special Session, *ACM SIGGRAPH 2016, USA* 2016
'SoftAR: Visually Manipulating Haptic Softness Perception in Spatial Augmented Reality'

The 18^{th} **Annual Meeting on Virtual Reality in Japan, *3DUI Top Conference, Japan*** 2015
'LazyNav: 3D Ground Navigation with Non-Critical Body Parts'

The 6^{th} **Korea-Japan Workshop on Mixed Reality, Japan** 2013
'Projection-based Mixed Reality for Deformable Surfaces'

Academic Service

Organization Committee

UIST 2017 (Documentation Chair) • SCF 2017 (Local Arrangement Chair) • CHI 2017 (Session Chair) • SUI 2016 (Documentation Chair) • VRSJ 2016 (Design Chair) • ICAT-EGVE 2015 (Design Chair)

Peer-Reviewer

IEEE ISMAR (2017, 2016) • ACM SIGGRAPH/SIGGRAPH Asia (2017, 2016) • ACM SUI (2016) • ACM UIST (2017, 2016, 2015) • ACM VRST (2017, 2016, 2015) • ACM HRI (2017, 2016, 2015)

Student Volunteer

ACM UIST 2016 • ACM UbiComp 2015 • ACM SIGGRAPH Asia 2014 • ACM Multimedia 2012

September 2017