Parinya Punpongsanon

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EDUCATION

Ph.D. in Engineering
September 2016 — Osaka University, Japan
Systems Innovation, Graduate School of Engineering Science
Advisor: Prof. Dr. Kosuke Sato and Assoc. Prof. Dr. Daisuke Iwai

Master of Engineering
September 2013 — Osaka University, Japan
Systems Innovation, Graduate School of Engineering Science
Advisor: Prof. Dr. Kosuke Sato and Assoc. Prof. Dr. Daisuke Iwai

Bachelor of Science
April 2010 — King Mongkut's University of Technology Thonburi, Thailand
Applied Computer Science and Multimedia,
Computer Science and Information Technology Department
Major GPA: 3.63 / 4.0 (1st class honor)

EXPERIENCE

MIT CSAIL | Postdoctoral Associate
January 2017 – Present | Cambridge, MA

Setup a new laboratory at MIT CSAIL with Stefanie.
Project: Spatial Augmented Reality + Personal Fabrication
Host advisor: Prof. Stefanie Mueller

JSPS | Postdoctoral Fellow
October 2016 – December 2016 | Tokyo, Japan

Young researcher fellowship sponsor by Japan Society for the Promotion Science (JSPS) host at Osaka University.
Project: Modify Human Perception in Spatial Augmented Reality
Host advisor: Prof. Dr. Kosuke Sato

TELECOM PARISTECH | Visiting Scholar + Research Internship
December 2013 – February 2014 | Paris, France

Computer Graphics Group (TSI-CNSR)
Project: Lazy 3D Navigation using non-critical body interaction
Host advisor: Prof. Dr. Tamy Boubekeur

KIATNAKIN BANK PLC. | Programmer Analyst
June 2010 – September 2011 | Bangkok, Thailand
- Maintenance and Support Core Banking system.
- Develop a new payment channel (e.g., ATMs, Loans).
- Support a tax payment system (Banking PND).

UNIVERSITY OF FUKUI | Exchange Student
October 2008 – September 2009 | Fukui, Japan

Human and Computational Intelligent Systems Laboratory, under Department of Multimedia Engineering
Host advisor: Prof. Yasuhiro Ogoshi

RESEARCH INTEREST
Spatial Augmented Reality,
Human perception,
Human-Computer Interaction,
Personal Fabrication

ACADEMIC SERVICE
Organization Committee
- ACM UIST 2017 (Documentation Chair)
- ACM SUI 2016 (AV Chair)
- VRSJ 2016 (Designer Chair)
- ICAT-EGVE 2015 (Designer Chair)

Peer-Reviewer
- IEEE ISMAR (2017, 2016)
- ACM SIGGRAPH Asia (2016)
- ACM SUI (2017, 2016)
- ACM UIST (2017, 2016)
- ACM VRST (2016, 2015)
- ACM HRI (2016, 2015)

Student Volunteer
- ACM UIST (2016)
- ACM UbiComp (2015)
- ACM SIGGRAPH Asia (2014)
- ACM Multimedia (2012)

SKILLS

PROGRAMMING
Java • JavaScript • Matlab • Python
C • C++ • CSS • PHP • PL/SQL
OpenGL • OpenCV • CUDA*

RESEARCH
Computer Vision (Tracking, IR Vision, Calibration) • User Experiment (Psychophysical, Analysis) Image Processing (Color Compensation) • 3D Modeling (Surface Validation)

SELECTED PUBLICATION

Journals

- Parinya Punpongsanon*, Emilie Guy, Daisuke Iwai, Kosuke Sato, Tamy Boubekeur, "Extended LazyNav: Virtual 3D Ground Navigation for Large Displays and Head-Mounted Displays". IEEE Transactions on Visualization and Computer Graphics, 2016. (In press)

- Parinya Punpongsanon*, Daisuke Iwai, Kosuke Sato, "SoftAR: Visually Manipulating Haptic Softness Perception in Spatial Augmented Reality". IEEE Transactions on Visualization and Computer Graphics, vol.21(11), pp. 1279–1288, November, 2016.

- Parinya Punpongsanon*, Daisuke Iwai, Kosuke Sato, "Projection-based Visualization of Tangential Deformation of Nonrigid Surface by Deformation Estimation Using Infrared Texture". Virtual Reality, Springer, vol.19(1), pp. 45–56, March, 2015.

Conference Papers and Technical Notes

- Emilie Guy, Parinya Punpongsanon*, Daisuke Iwai, Kosuke Sato, 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. [Best Paper]

- Parinya Punpongsanon*, Emilie Guy, Tamy Boubekeur, Daisuke Iwai, 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.

- Parinya Punpongsanon*, Daisuke Iwai, 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. 301–302, 2014.

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

- Parinya Punpongsanon*, Daisuke Iwai, Kosuke Sato. "Infrared-based Tangential Deformation Estimation Technique". Presented in the 6th Thailand-Japan International Academic Conference (TJIA), 2013.

- Parinya Punpongsanon*, Daisuke Iwai, Kosuke Sato. "Projection-based Mixed Reality for Deformable Surfaces". Presented in the 6th Korea-Japan Workshop on Mixed Reality (KJMR), 2013. [Best Presentation]

GRANTS AND AWARDS

2016	Best Student Volunteer	ACM UIST 2016
2016	Grants	JSPS Research Fellow (Apr. 2016 – Mar. 2018)
2015	Best Paper	IEEE 3DUI 2015
2014	Best Student Volunteer	ACM SIGGRAPH Asia 2014
2013	Best Presentation	Korea-Japan Workshop on Mixed Reality 2013
2011	Grants	MEXT Scholarship (Oct. 2011 – Sep. 2016)

REFERENCES

ASSOC. PROF. DR. DAISUKE IWAI
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Associate Professor, SENS Laboratory at Osaka University
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PROF. DR. TAMY BOUBEKEUR
Visiting scholar research advisor
Professor, Computer Graphics Group at Telecom ParisTech
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PROF. DR. STEFANIE MUELLER
Postdoctoral associate advisor
Assistant Professor, HCI Engineering Group at MIT CSAIL
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