

Shunsuke Saito

University of Southern California
Viterbi School of Engineering
Department of Computer Science
12015 E Waterfront Dr,
Los Angeles, CA 90094

Phone: (213) 446-0733
Email: shunsuke.saito16@gmail.com
Homepage: <http://www-scf.usc.edu/~saitos/>

Education

Ph.D. Computer Science, University of Southern California, 2016–present, GPA 4.0/4.0

M.A. Applied Physics, Waseda University, 2013–2014 (Early Graduation)
- Visiting Student, University of California, Los Angeles, 2013

B.S. Applied Physics, Waseda University, 2009–2013

Work Experience

Research Intern, Adobe Research, 2019

Research Intern, Pinscreen, 2018

Research Intern, Facebook Reality Lab Pittsburgh, 2017

Visiting Researcher, University of Southern California, 2015

Research Intern, FOVE Inc., 2015

Visiting Researcher, University of Pennsylvania, 2014–2015

Project Leader, IPA MITOH Program, 2015

Research Intern, Yahoo Japan Corp, 2012–2013

Publications

Journal Articles

Shunsuke Saito, Liwen Hu, Chongyang Ma, Hikaru Ibayashi, Linjie Luo, and Hao Li. "3D Hair Synthesis Using Volumetric Variational Autoencoders". *ACM Transactions on Graphics (In proc. SIGGRAPH Asia 2018)*.

Koki Nagano, Jaewoo Seo, Jun Xing, Lingyu Wei, Zimo Li, **Shunsuke Saito**, Aviral Agarwal, Jens Fursund, and Hao Li. "paGAN: Real-time Avatars Using Dynamic Textures". *ACM Transactions on Graphics (In proc. SIGGRAPH Asia 2018)*.

Shugo Yamaguchi*, **Shunsuke Saito***, Koki Nagano, Yajie Zhao, Weikai Chen, Shigeo Morishima, and Hao Li. "High-fidelity Facial Geometry and Reflectance Inference from an Unconstrained Image". *ACM Transactions on Graphics (In proc. SIGGRAPH 2018)*.

Liwen Hu*, **Shunsuke Saito***, Lingyu Wei*, Koki Nagano, Jaewoo Seo, Jens Fursund, Iman Sadeghi, Carrie Sun, Yen-Chun Chen, and Hao Li. "Avatar Digitization from a Single Image for Real-Time Rendering". *ACM Transactions on Graphics (In proc. SIGGRAPH Asia 2017)*.

Graham Fyffe, Koki Nagano, Loc Huynh, **Shunsuke Saito**, Jay Bush, Andrew Jones, Hao Li, and Paul Debevec. "Multi-View Stereo on Consistent Face Topology". *Computer Graphics Forum (In proc. Eurographics 2017)*.

Kyle Olszewski, Joseph J. Lim, **Shunsuke Saito**, and Hao Li. "High-Fidelity Facial and Speech Animation for VR HMDs". *ACM Transactions on Graphics (In proc. SIGGRAPH Asia 2016)*.

Shunsuke Saito, Zi-Ye Zhou, and Ladislav Kavan. "Computational Bodybuilding: Anatomically-based Modeling of Human Bodies". *ACM Transactions on Graphics (In proc. SIGGRAPH 2015)*.

Shunsuke Saito, Nobuyuki Umetani, and Shigeo Morishima. "Macroscopic and Microscopic Deformation Coupling in Up-sampled Cloth Simulation". *Computer Animation and Virtual Worlds (In proc. CASA 2014)*.

Proceedings

Ryota Natsume*, **Shunsuke Saito***, Zeng Huang, Weikai Chen, Chongyang Ma, Hao Li, Shigeo Morishima. "SiCloPe: Silhouette-Based Clothed People". CVPR 2019 (oral).

Loc Huynh, Weikai Chen, **Shunsuke Saito**, Jun Xing, Koki Nagano, Andrew Jones, Paul Debevec, Hao Li. "Mesoscopic Facial Geometry Inference using Deep Neural Networks". CVPR 2018 (spotlight).

Pavel A. Savkin, **Shunsuke Saito**, Jarich Vansteenberghe, Tsukasa Fukusato, Lochlainn Wilson, and Shigeo Morishima. "Outside-in Monocular IR Camera based HMD Pose Estimation via Geometric Optimization". VRST 2017.

Fumiya Narita, **Shunsuke Saito**, Tsukasa Fukusato, and Shigeo Morishima. "Quasi-Developable Garment Transfer for Animals". SIGGRAPH Asia 2017 Technical Brief.

Ronald Yu, **Shunsuke Saito**, Haoxiang Li, Duygu Ceylan, and Hao Li. "Learning Dense Facial Correspondences in Unconstrained Images". ICCV 2017.

Kyle Olszewski*, Zimo Li*, Chao Yang*, Yi Zhou, Ronald Yu, Zeng Huang, Sitao Xiang, **Shunsuke Saito**, Pushmeet Kohli, and Hao Li. "Realistic Dynamic Facial Textures From a Single Image Using GANs". ICCV 2017.

Samuli Laine, Tero Karras, Timo Aila, Antti Herva, **Shunsuke Saito**, Ronald Yu, Hao Li, and Jaakko Lehtinen. "Production-Level Facial Performance Capture Using Deep Convolutional Neural Networks". SCA 2017.

Shunsuke Saito*, Lingyu Wei*, Liwen Hu, Koki Nagano, and Hao Li. "Photorealistic Facial Texture Inference Using Deep Neural Networks". CVPR 2017 (spotlight).

Shunsuke Saito, Tianye Li, and Hao Li. "Real-Time Facial Segmentation and Performance Capture from RGB Input". ECCV 2016.

Fumiya Narita, **Shunsuke Saito**, Takuya Kato, Tsukasa Fukusato, and Shigeo Morishima. "Garment Transfer for Quadruped Characters". Eurographics 2016 (short paper).

Shunsuke Saito, Ryuuki Sakamoto, and Shigeo Morishima. "PatchMove: Patch-based Fast Image Interpolation with Greedy Bidirectional Correspondence". Pacific Graphics 2014 (short paper).

Takuya Kato, **Shunsuke Saito**, Masahide Kawai, Tomoyori Iwao, Akinobu Maejima and Shigeo Morishima. "Character Transfer: Example-based individuality retargeting for facial animations". WSCG 2014.

Exhibition / Talk

Hao Li, **Shunsuke Saito**, Lingyu Wei, Iman Sadeghi, Liwen Hu, Jaewoo Seo, Koki Nagano, Jens Fursund, Yen-Chun Chen, and Stephen Chen. "Pinscreen: Creating Performance-driven Avatars in Seconds". *ACM SIGGRAPH 2017 Real Time Live!*.

Shunsuke Saito, Lingyu Wei, Jens Fursund, Liwen Hu, Chao Yang, Ronald Yu, Kyle Olszewski, Stephen Chen, Isabella Benavente, Yen-Chun Chen, and Hao Li. "Pinscreen: 3D Avatar from a Single Image". *SIGGRAPH Asia E-tech 2016*.

Technical Paper Reviewer

SIGGRAPH (2019), TPAMI (2018-19), Transaction on Graphics (2018), TVCG (2018), ACCV (2018), CVPR (2018), SIGGRAPH ASIA (2016-17), Computer Graphics Forum (2017), VRST(2017), Pacific Graphics (2016), Eurographics (2016), Graphical Models (2015)

Computer Skills

C++, C, MATLAB, Python, CUDA, OpenGL, OpenCV

Scholarship and Awards

Best Poster Award, USC PhD Visit Day, 2017
SUPER CREATOR, IPA Exploratory Software, 2015
ACM Student Research Competition Semi-Finalist, 2014
MIRU Interactive Presentation Award, Okayama, Japan, 2014
LAUNCH Festival Hackathon Finalist (Top 7), San Francisco, 2014
CSC-UCLA Scholarship Program, 2013
Okuma Memorial Special Scholarship, 2011

Last updated: March 11, 2019

<http://www-scf.usc.edu/~saitos/cv.pdf>