Yuting Ye

CONTACT INFORMATION	*E-mail:* yutingye.public@gmail.com *WWW:* http://yutingye.info

<small>WORK EXPERIENCES</small>

Reality Labs Research at Meta, *Research Scientist*   July 2015 - present
- Reconstruction and synthesis of realistic and stylized virtual humans.
- Hand tracking using deep learning and computer vision (available on Quest VR headset).

Industrial Light & Magic , *R&D Engineer*   January 2012 - July 2015
- Animation, rigging, facial performance capture and retargeting
- The future of animation production roadmap (relocated to Singapore for 6 months).

<small>SKILLS</small>

Languages and frameworks: C/C++, Python, PyTorch
Platforms: Linux, Windows.

<small>PUBLICATIONS</small>

A. Adkins, L. Lin, N. Normoyle, R. Canales, **Y. Ye**, S. Jörg. "Evaluating Grasping Visualizations and Control Modes in a VR Game". In *ACM TAP 18(4)* 2021.

H. Zhang, **Y. Ye**, T. Shiratori, T. Komura. "ManipNet: Neural Manipulation Synthesis with a Hand-Object Spatial Representation". In *ACM SIGGRAPH 40(4)* 2021.

Y, Zhou, C. Wu, Z. Li, C. Cao, **Y. Ye**, J. Saragih, H. Li, Y. Sheikh. "Fully Convolutional Mesh Autoencoder Using Efficient Spatially Varying Kernels". In *NeurIPS* 2020.

S. Han, B. Liu, R. Cabezas, C. D. Twigg, P. Zhang, J. Petkau, T. H. Yu, B. Tai, M. Akbay, C. Wan, R. Wang, L. Tao, **Y. Ye**, A. Nitzan, G. Dong, Z. Wang. "MEgATrack: Monochrome Egocentric Articulated Hand-Tracking for Virtual Reality". In *ACM SIGGRAPH 39(4)* 2020.

J. Habekost, T. Shiratori, **Y. Ye**, T. Komura. "Learning 3D Global Human Motion Estimation From Unpaired, Disjoint Datasets". In *British Machine Vision Conference (BMVC)* 2020.

R. Canales, A. Normoyle, Y. Sun, **Y. Ye**, M. Di Luca, S. Jörg. "Virtual Grasping Feedback and Virtual Hand Ownership". In *ACM Symposium on Applied Perception (SAP)* 2019.

L. Lin, N. Normoyle, A. Adkins, Y. Sun, A.Robb, **Y. Ye**, M. Di Luca, S. Jörg. "The Effect of Hand Size and Interaction Modality on the Virtual Hand Illusion". In *IEEE VR* 2019.

Y. Li, C. D. Twigg, **Y. Ye**, L. Tao, X. Wang. "Disentangling Pose From Appearance in Monochrome Hand Images". In *ICCV Workshop* 2019.

A. Sengupta, **Y. Ye**, R. Wang, C. Liu, K. Roy. "Going Deeper in Spiking Neural Networks: VGG and Residual Architectures". In *Frontiers in Neuroscience* 2019.

S. Han, B. Liu, R. Wang, **Y. Ye**, C. D. Twigg, K. Kin. "Online Optical Marker-based Hand Tracking With Deep Labels". In *ACM SIGGRAPH 37(4)* 2018.

JS. Lee, MX. Grey, S. Ha, T. Kunz, S. Jain, **Y. Ye**, SS. Srinivasa, M. Stilman, CK. Liu. "DART: Dynamic Animation and Robotics Toolkit". In *Journal of Open Source Software 3(22)* 2018.

D. Zimmermann, S. Coros, **Y. Ye**, R. Sumner, M. Gross. "Hierarchical Planning and Control for Complex Motor Task". In *Symposium on Computer Animation (SCA)* 2015.

S. Grabli, K. Sprout, **Y. Ye**. "Feature-based Texture Stretch Compensation for 3D Meshes". In *ACM SIGGRAPH Talks* 2015.

R. Rose, **Y. Ye**. "Multi-resolution Geometric Transfer for Jurassic World". In *ACM SIGGRAPH Talks* 2015.

H. Li, J. Yu, **Y. Ye**, C. Bregler. "Realtime Facial Animation With On-the-fly Correctives". In

ACM SIGGRAPH 32(4) 2013.

K. Bhat, R. Goldenthal, **Y. Ye**, R. Mallet, M. Koperwas. "High Fidelity Facial Animation Capturing and Retargeting With Contours". In *Symposium on Computer Animation (SCA)* 2013.

S. Ha, **Y. Ye**, C. K. Liu. "Falling and Landing Motion Control for Character Animation". In *ACM SIGGRAPH Asia 31(5)* 2012.

Y. Ye, C. K. Liu. "Synthesis of Detailed Hand Manipulations Using Contact Sampling". In *ACM SIGGRAPH 31(4)* 2012.

Y. Ye, C. K. Liu. "Optimal Feedback Control for Character Animation Using an Abstract Model". In *ACM SIGGRAPH 29(4)* 2010.

Y. Ye, C. K. Liu. "Synthesis of Responsive Motion Using a Dynamic Model". In *Computer Graphics Forum (Eurographics) 29(2)* 2010.

S. Jain, **Y. Ye**, C. K. Liu. "Optimization-based Interactive Motion Synthesis". In *ACM Transactions on Graphics (TOG) 28(1)* 2009.

Y. Ye, C. K. Liu. "Animating Responsive Characters With Dynamic Constraints in Near-unactuated Coordinates". In *ACM SIGGRAPH Asia 27(5)* 2008.

PATENTS
Y. Ye, RY. Wang, CD. Twigg, "Hand calibration using single depth camera", 2020, US10803616B1

P. Wu, S. Han, CD. Twigg, RY. Wang, **Y. Ye**, "Passive object tracking using camera", 2020, US10719953B1

S. Han, CD. Twigg, RY. Wang, **Y. Ye**, "Hand tracking using a passive camera system", 2020, US10706584B1

R. Rose, **Y. Ye**, S. Jones, "Animation data transfer between geometric models and associated animation models", 2018, US9858700B2.

KS. Bhat, AR. Goldenthal, **Y. Ye**, R. Mallet, M. Koperwas, "Facial animation models", 2017, US9747716B1.

H. Li, J. Yu, **Y. Ye**, C. Bregler, "Real-time performance capture with on-the-fly correctives", 2016, US9317954B2.

EDUCATION
Georgia Institute of Technology, Ph.D.   August 2007 - December 2011
  • "Simulation of Characters with Natural Interactions". Advisor: Dr. C. Karen Liu

University of Southern California, Ph.D. student   August 2006 - May 2007

University of Virginia, M.CS.   August 2004 - May 2006
  • "A Momentum-Based Bipedal Balance Controller". Advisor: Dr. David C. Brogan

Peking University, B.S.   September 2000 - June 2004
  • "A 2D Vector Graphics Editing System". Advisor: Dr. Guoping Wang

PROFESSIONAL
SERVICES
Committee
SIGGRAPH Technical Papers 2019 (N.A.), 2020 (N.A.), 2021 (Asia), 2022 (N.A.)
SIGGRAPH Asia Course 2018, Technical Briefs and Posters 2019
Computer Animation and Social Agents (CASA) Papers 2017, 2018, 2019, 2020, 2021
Symposium on Computer Animation (SCA) Papers 2014, 2015, 2016, 2021

Paper Reviewer
SIGGRAPH, SIGGRAPH Asia, ACM TOG, CHI, TVCG, Eurographics, Computer Graphics Forum, Computer Animation and Virtual World

Editor
Papers preview video, SIGGRAPH 2008