

Kangxue Yin

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Position

- Jun. 2020 – Now, Research Scientist, **NVIDIA**, Toronto, Canada

Education

- Sep. 2015 – May 2020,
Ph.D. in Computer Science, **Simon Fraser University**, Canada
- Thesis: Learning Shape-to-Shape Transformation
- Advisor: Prof. Hao(Richard)Zhang
- Committee: Prof. Hao(Richard)Zhang, Prof. Hui Huang, Prof. Daniel Cohen-Or
- Sep. 2008 - Jul. 2012,
B.Eng. in Software Engineering, **Chang'an University**, China

Work History

- Jun. 2019 - Sep. 2019,
Research Intern, **Adobe Research**, San Francisco, U.S.
- Mentors: Dr. Siddhartha Chaudhuri, Dr. Matthew Fisher, and Dr. Vladimir Kim
- Jul. 2012 - Aug. 2015,
Research Assistant, **Shenzhen Institutes of Advanced Technology, CAS**, Shenzhen, China
- Supervisor: Prof. Hui Huang

Publications

- [1]. COALESCE: Component Assembly by Learning to Synthesize Connections.
K. Yin, Z. Chen, S. Chaudhuri, M. Fisher, V. Kim, H. Zhang.
Proc. of 3DV 2020 (oral)
- [2]. 3D Shape Generation via Functionality-Aware Model Evolution.
Y. Guan, H. Liu, K. Liu, **K. Yin**, R. Hu, O. van Kaick, Y. Zhang, E. Yumer, N. Carr, R. Mech, H. Zhang.
IEEE Transactions on Visualization and Computer Graphics(TVCG), 2020.
- [3]. LOGAN: Unpaired Shape Transform in Latent Overcomplete Space
K. Yin, Z. Chen, H. Huang, D. Cohen-Or, H. Zhang.
ACM Transactions on Graphics 38(6)(Special Issue of SIGGRAPH ASIA 2019).
[*selected by SIGGRAPH ASIA 2019 as **one of six papers featured for press release***]
- [4]. BAE-NET: Branched Autoencoder for Shape Co-Segmentation.
Z. Chen, **K. Yin**, M. Fisher, S. Chaudhuri, H. Zhang.
Proc. of ICCV 2019
- [5]. P2P-NET: Bidirectional Point Displacement Net for Shape Transform.
K. Yin, H. Huang, D. Cohen-or, H. Zhang.
ACM Transactions on Graphics 37(4)(Special Issue of SIGGRAPH 2018).
- [6]. A Sampling Approach to Generating Closely Interacting 3D Pose-pairs from 2D Annotations.
K. Yin, H. Huang, E. Ho, H. Wang, T. Komura, D. Cohen-Or, H. Zhang.
IEEE Transactions on Visualization and Computer Graphics(TVCG), 2018.
- [7]. Full 3D Plant Reconstruction via Intrusive Acquisition.
K. Yin, H. Huang, P. Long, A. Gaissinski, M. Gong, A. Sharf.
Computer Graphics Forum(CGF) 34(2), 2016.
- [8]. Generalized Cylinder Decomposition.
Y. Zhou, **K. Yin**, H. Huang, H. Zhang, M. Gong, D. Cohen-Or.
ACM Transactions on Graphics 34(6) (Special Issue of SIGGRAPH ASIA 2015).
- [9]. Morfit: Interactive Surface Reconstruction from Incomplete Point Clouds with Curve-Driven Topology and Geometry Control.
K. Yin, H. Huang, H. Zhang, M. Gong, D. Cohen-or, B. Chen.
ACM Transactions on Graphics 33(6) (Special Issue of SIGGRAPH ASIA 2014).

- [10]. "Mind the Gap": Tele-Registration for Structure-Driven Image Completion.
H. Huang, **K. Yin**, M. Gong, D. Lischinski, D. Cohen-Or, U. Ascher, B. Chen.
ACM Transactions on Graphics 32(6) (Special Issue of SIGGRAPH ASIA 2013).

Preprint

- [1]. Neural Geometric Level of Detail: Real-time Rendering with Implicit 3D Shapes
T. Takikawa, J. Litalien, **K. Yin**, K. Kreis, C. Loop, D. Nowrouzezahrai, A. Jacobson, M. McGuire, S. Fidler
arXiv:2101.10994

Teaching Experience

CMPT 225 – Data Structures and Programming	TA, Summer 2016, SFU
CMPT 102 – Introduction to Scientific Computer Programming	TA, Fall 2018, SFU
CMPT 767 – Visualization	TA, Fall 2018, SFU
CMPT 742 – Practices in Visual Computing	TA, Fall 2019, SFU

Technical Skills

Programming - C/C++, Python, Matlab, TensorFlow, PyTorch, CUDA, OpenGL, etc.

Program Committees

ACM SIGGRAPH Symposium on Interactive 3D Graphics and Games (I3D) 2020
International Joint Conference on Artificial Intelligence (IJCAI) 2021

Selected Honors

Chinese Government Award for Outstanding Self-financed Students Abroad - ("Self-financed" here means not financially supported by Chinese government)	2018
2018 Adobe PhD Fellowship Finalist	2018
SFU Graduate Fellowship	SFU, 2016~17
Faculty of Applied Sciences Graduate Fellowship	SFU, 2016~17
Computing Science Graduate Fellowship	SFU, 2015~18
Special Graduate Entrance Scholarship	SFU, 2015
Annual Outstanding Employee Award	SIAT-CAS, 2014
Annual Outstanding Employee Award	SIAT-CAS, 2013
2nd Prize in GPU Programming Contest held by NVIDIA China	2011
3rd Prize in GPU Programming Contest held by NVIDIA China	2010
Top Class Scholarship awarded by Chang'an University	2009~10