

# Kangxue Yin

Email: [kangxue.yin@gmail.com](mailto:kangxue.yin@gmail.com) Website: [kangxue.org](http://kangxue.org)

## Position

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

## Education

- Sep. 2015 – May 2020,  
Ph.D. in Computing Science, **Simon Fraser University**, Canada  
- Thesis: Learning Shape-to-Shape Transformation  
- Supervisory committee: Prof. Hao(Richard) Zhang(senior supervisor), 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.
- Jul. 2012 - Aug. 2015,  
Research Assistant, **Shenzhen Institutes of Advanced Technology, CAS**, Shenzhen, China

## Publications

- [1]. 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**]*
- [2]. BAE-NET: Branched Autoencoder for Shape Co-Segmentation.  
Z. Chen, **K. Yin**, M. Fisher, S. Chaudhuri, H. Zhang.  
Proc. of ICCV 2019
- [3]. 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 ).
- [4]. 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.
- [5]. 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.
- [6]. 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 ).
- [7]. 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).
- [8]. "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]. COALESCE: Component Assembly by Learning to Synthesize Connections.  
**K. Yin**, Z. Chen, S. Chaudhuri, M. Fisher, V. Kim, H. Zhang.  
arXiv preprint arXiv:2008.01936

- [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.  
arXiv preprint arXiv:2005.04464

### **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

### **Selected Honors**

Chinese Government Award for Outstanding Self-financed Students Abroad - ("Self-financed" here means not financially supported by Chinese government)	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 - (Top 5% employees received this award based on work performance)	SIAT-CAS, 2013
2nd Prize in GPU Programming Contest held by NVIDIA China	2011
3rd Prize in GPU Programming Contest held by NVIDIA China - (Most participants in this contest were graduate students; I was undergraduate)	2010
Top Class Scholarship awarded by Chang'an University	2009~10