Kai Wang

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EDUCATION

Brown University
PhD, Computer Science
Dissertation: *Learning Autoregressive Generative Models of 3D Shapes and Scenes*
Advisor: Daniel Ritchie
2017 – 2023

Williams College
BA, Computer Science
Honors in Computer Science, Magna Cum Laude
Phi Beta Kappa (Junior Year), Sigma Xi
2011 – 2016

Hangzhou Foreign Languages School
2005 – 2011

EMPLOYMENT

Assistant Professor — Shanghai, China
ShanghaiTech University — 2026 – Now

Visiting Researcher — 2025 – 2026
Simon Fraser University — Vancouver, BC, Canada

Postdoctoral Scientist — 2023 – 2025
Amazon — Vancouver, BC, Canada

Research Intern — Summer 2020
Adobe Inc. — Remote

Research Intern — Summer 2019
Facebook AI Research — Menlo Park, CA

Graduate Research Assistant — Providence, RI
Brown University — 2017 – 2023

Cofounder — Hangzhou, China
Unnamed Startup — 2016 – 2017

Cofounder — Hangzhou, China
Stoooges Education — 2013 – 2014

REFEREED PUBLICATIONS

Learning Object Placement Programs for Indoor Scene Synthesis with Iterative Self Training. Adrian Chang, Kai Wang, Yuanbo Li, Manolis Savva, Angel X. Chang, Daniel Ritchie. *AI for Content Creation Workshop, CVPR 2026.*

Articulate That Object Part (ATOP): 3D Part Articulation from Text and via Motion Personalization. Aditya Vora, Sauradip Nag, Kai Wang, Hao Zhang. *ACM Transactions on Graphics, 2026.*

The Shape Part Slot Machine: Contact-based Reasoning for Generating 3D Shapes from Parts. Kai Wang, Paul Guerrero, Vladimir Kim, Siddhartha Chaud-

huri, Minhyuk Sung, Daniel Ritchie. *ECCV 2022*.

Roominoes: Generating Novel 3D Floor Plans From Existing 3D Rooms. Kai Wang, Xianghao Xu, Leon Lei, Natalie Lindsay, Selena Ling, Angel X. Chang, Manolis Savva, Daniel Ritchie. *SGP 2021*.

ShapeAssembly: Learning to Generate Programs for 3D Shape Structure Synthesis. R. Kenny Jones, Theresa Barton, Xianghao Xu, Kai Wang, Ellen Jiang, Paul Guerrero, Niloy Mitra, Daniel Ritchie. *SIGGRAPH Asia 2020*.

PlanIT: Planning and Instantiating Indoor Scenes with Relation Graph and Spatial Prior Networks. Kai Wang, Yu-an Lin, Ben Weissmann, Manolis Savva, Angel X. Chang, Daniel Ritchie. *SIGGRAPH 2019*.

Fast and Flexible Indoor Scene Synthesis via Deep Generative Models. Daniel Ritchie*, Kai Wang*, Yu-an Lin. (*equal contribution) *CVPR 2019*.

Deep Convolutional Priors for Indoor Scene Synthesis. Kai Wang, Manolis Savva, Angel X. Chang, Daniel Ritchie. *SIGGRAPH 2018*.

TECHNICAL REPORTS

Advances in 4D Representation: Geometry, Motion, and Interaction. Mingrui Zhao, Sauradip Nag, Kai Wang, Aditya Vora, Guangda Ji, Peter Chun, Ali Mahdavi-Amiri, Hao Zhang. *arXiv:2510.19255, 2025*.

INVITED TALKS

Learning Generalizable and Controllable 3D Generative Models
Adobe Research — July 2024

Learning Autoregressive Generative Models of 3D Shapes and Scenes
Stanford University, *Computer Science Department* — October 2022

TUTORIALS & WORKSHOPS

AI for 3D Content Creation — October 2025
Hezhen Hu, Georgios Pavlakos, Despoina Paschalidou, Nikos Kolotouros, Davis Rempe, Angel X. Chang, Kai Wang, Amlan Kar, Kaichun Mo, Daniel Ritchie, Leonidas Guibas
ICCV 2025 Workshop

3D Vision and Modeling Challenges in eCommerce — October 2024
Kai Wang, Yiming Qian, Loris Bazzani, Angel X. Chang, Peter Gehler, Francisca Gil-Ureta, Brian Jackson, Despoina Paschalidou, Daniel Ritchie, Javier Romero, Jian Wang, Fenggen Yu, Xu Zhang, Chuhang Zou
ECCV 2024 Workshop

AI for 3D Content Creation — October 2024
Despoina Paschalidou, Georgios Pavlakos, Davis Rempe, Angel X. Chang, Kai Wang, Amlan Kar, Daniel Ritchie, Kaichun Mo, Manolis Savva, Paul Guerrero, Siyu Tang, Leonidas Guibas
ECCV 2024 Workshop

AI for 3D Generation — June 2024
Despoina Paschalidou, Georgios Pavlakos, Davis Rempe, Angel X. Chang, Kai Wang, Amlan Kar, Daniel Ritchie, Kaichun Mo, Manolis Savva, Paul Guerrero, Siyu Tang, Leonidas Guibas
CVPR 2024 Workshop

Structural and Compositional Learning on 3D Data June 2023
Kaichun Mo, Kai Wang, Marios Loizou, Despoina Paschalidou, Paul Guerrero, Minhyuk Sung, Antoni Rosinol, Melinos Averkiou, Shuran Song, Evangelos Kalogerakis, Luca Carlone, Hao Zhang, Leonidas Guibas
CVPR 2023 Workshop

Learning to Generate 3D Shapes and Scenes October 2022
Kai Wang, Akshay Gadi Patil, Angel X. Chang, Paul Guerrero, Daniel Ritchie, Manolis Savva
ECCV 2022 Workshop

Structural and Compositional Learning on 3D Data October 2021
Kaichun Mo, Paul Guerrero, Kai Wang, Antoni Rosinol, Fei Xia, Danfei Xu, Songfang Han, Minhyuk Sung
ICCV 2021 Workshop

TEACHING

Graduate Teaching Assistant Spring 2019
Brown CSCI2240: Interactive Computer Graphics

Teaching Assistant Spring 2015, Spring 2016
Williams CS256: Algorithm Design and Analysis

Teaching Assistant Fall 2015
Williams CS361: Theory of Computation

Teaching Assistant Spring 2014
Williams ARTS254: Digital Photography

Teaching Assistant Fall 2012
Williams CS136: Data Structures and Advanced Programming

RESEARCH MENTORING

Guangda Ji	Simon Fraser CS PhD (2025 – Present)
Mingrui Zhao	Simon Fraser CS PhD (2025 – Present)
Ruiqi Wang	Simon Fraser CS PhD / Amazon Intern (2024 – Present)
Qinchan Li	Simon Fraser CS PhD (2025 – 2026)
Aditya Vora	Simon Fraser CS PhD / Amazon Intern (2024 – 2025)
Adrian Chang	Brown CS ScM (2022 – 2025)

AWARDS & HONORS

ICLR Outstanding Reviewer	2021
Adobe Research Fellowship	2020
NeurIPS 400 Highest Scoring Reviewer	2019
Brown Graduate Fellowship	2017

SERVICE

Program Committee Member / Area Chair
SIGGRAPH Asia: 2024–2025
SIGGRAPH Asia Posters and Technical Communications: 2024–2026
Eurographics Short Papers: 2026
3DV: 2026

Conference Reviewer
SIGGRAPH: 2021, 2023–2026
SIGGRAPH Asia: 2020–2025
Eurographics: 2021, 2025–2026
CVPR: 2021–2024, 2026
ECCV: 2022
ICCV: 2023, 2025
3DV: 2021, 2022, 2025
NeurIPS: 2019–2025
ICML: 2020–2024
ICLR: 2021–2025
AAAI: 2025
AISTATS: 2025–2026
ACL Rolling Review: 2022
IEEE ISMAR: 2024

Journal Reviewer
ACM TOG: 2021–2025
IEEE TVCG: 2018, 2019, 2021–2025
Computer Graphics Forum: 2024
JMLR: 2022
The Visual Computer: 2022

Other Reviews
SIGGRAPH Asia Emergent Technologies: 2021
SIGGRAPH Posters: 2022