Arthur Kefan Chen

• Website: arthurchen0518.github.io • LinkedIn: www.linkedin.com/in/kefanc
• kefan_chen@brown.edu • +1 (551) 208-2027

EDUCATION

Brown University, Ph.D. candidate in Computer Science 2022 – 2026
- Advisor: Srinath Sridhar
- Research focus: 3D Vision, Diffusion GenAI, LLM/LVM, Digital Human, Embodied AI, VR/XR.

University of Toronto, Bachelor in Electrical Engineering 2014 – 2018

SKILLS

Python, C++, C, Pytorch, Tensorflow, LLM/LVM, Large-scale ML training, Research

INDUSTRY EXPERIENCE

Waymo (Google Self-driving), Research Intern Jun 2025 – Aug 2025
- Design multi-modal 3D perception models for autonomous driving leveraging LLM/LVMs.

Meta AI, Researcher Jun 2024 – Mar 2025
- Research interactive 3D avatars using Gaussian Splatting for realistic digital human and VR/XR.

Meta Reality Labs, Research Scientist Intern Jun 2023 – Dec 2023
- Research large image and video diffusion generative models for dexterous hand generation.

Pinterest, Machine Learning Engineer Jan 2022 – Sep 2022
- Develop ML models to scalably extract metadata for shopping content data mining.

Gatik AI, Perception Engineer Sep 2020 – Dec 2021
- Lead research and development of multimodal perception and sensor fusion for autonomous driving.

Google Research, AI Resident Jun 2018 – Aug 2020
- Research 3D computer vision, camera pose estimation, and SO(3) representation learning.

NVIDIA, Research Intern May 2017 – Aug 2017
- Develop Isaac virtual simulation for robotic training demonstrated at SIGGRAPH 2017. (News)

PUBLICATION

[1] **K Chen**, S Oprea, J Theiss, S Mohan, S Sridhar, A Prakash, "InteractAvatar: Modeling Hand-Face Interaction in Photorealistic Avatars with Deformable Gaussians," *under review*, 2025.

[2] **K Chen**, C Min, L Zhang, S Hampali, C Keskin, S Sridhar, "FoundHand: Large-Scale Domain-Specific Learning for Controllable Hand Image Generation," *Conference on Computer Vision and Pattern Recognition (**CVPR**)*, 2025.

[3] A Rai, D Wang, M Jain, N Sarafianos, **K Chen**, S Sridhar, A Prakash, "UVGS: Reimagining Unstructured 3D Gaussian Splatting using UV Mapping," *Conference on Computer Vision and Pattern Recognition (**CVPR**)*, 2025.

[4] C Pokhariya, I Shah, A Xing, Z Li, **K Chen**, A Sharma, S Sridhar, "MANUS: Markerless Grasp Capture using Articulated 3D Gaussians," *Conference on Computer Vision and Pattern Recognition (**CVPR**)*, 2024.

[5] C Lu, P Zhou, A Xing, C Pokhariya, A Dey, I Shah, R Mavidipalli, D Hu, A Comport, **K Chen**, S Sridhar, "DiVa-360: The Dynamic Visual Dataset for Immersive Neural Fields," *Conference on Computer Vision and Pattern Recognition (**CVPR**)*, 2024. (**Spotlight, 2.81% acceptance rate.**)

[6] **K Chen**, Noah Snavely, Ameesh Makadia, "Wide-Baseline Relative Camera Pose Estimation with Directional Learning," *Conference on Computer Vision and Pattern Recognition (**CVPR**)*, 2021.

[7] Jake Levinson, Carlos Esteves, **K Chen**, Noah Snavely, Angjoo Kanazawa, Afshin Rostamizadeh, Ameesh Makadia, "An Analysis of SVD for Deep Rotation Estimation," *Conference on Neural Information Processing Systems (**NeurIPS**)*, 2020.

ACADEMIC SERVICES

Serve as reviewer for top AI conferences, CVPR, ICCV, ECCV, NeurIPS, ICML.