

Hanke Chen

Website: cs.cmu.edu/%7Ehanke/

Github: github.com/kokecacao

Research Proposal: proposal.kokecacao.me

Email: hanke@cmu.edu ✉

LinkedIn: linkedin.com/in/chenhanke in

Interests: 3D Generation, Graphics Systems, tools for artists

EDUCATION

Carnegie Mellon University (CMU)

Pittsburgh, PA

Bachelor of Computer Science and Arts in Computer Science and Art Aug 2020 - May 2026 (leave for startup)

Courses: Machine Learning, Deep Learning, AI for Robotics, Distributed Systems, Computer Systems, Computer Graphics, Theoretical CS, Theoretical Quantum Computing, Data Structures, Functional Programming, Compiler, Statistics, Probability, Generative Computer Vision (Grad Level)

EXPERIENCE

Simulation Intelligence Group (SIG) @ CMU

Pittsburgh, PA

Research Collaboration

Sep 2024 - Present

- Multiple publications about 3D scene generation advised by Prof. Minchen Li.

Stealth @ Private Investors

San Francisco, CA + Remote

Co-founder, Research and Development

Sep 2023 - Present

- Supported by U.S. Venture Capital (Afore Capital 2024 Summer Batch). Building next-gen 3D content creation tool.
- Skills:** Kubernetes, ReactJS, Redis, DeepSpeed, Data Mining

Midjourney

San Francisco, CA

Research and Development

Jun 2023 - Sep 2023

- Research engineering on 3D assets generation for their potential 3D generation product.

Wireless Sensing and Embedded System (WiSE) Lab @ CMU

Pittsburgh, PA

Research Assistance

May 2022 - May 2023

- Speed up NeRF training from 40 sec to 1 sec w/ multilevel page table, advised by Prof. Anthony Rowe.
- Skills:** CUDA Programming, C++, PyTorch, Computer Graphics, Computer Vision

DeepVocab @ CMU Olympus Incubator

Pittsburgh, PA

Co-founder, Machine Learning Engineer, Software Engineer

Jun 2020 - Oct 2022

- Lead of 8 people. Our product uses CV and NLP to predict memory decay for reminder.
- Skills:** Computer Vision, Natural Language Processing, CI/CD, SQLite, HiveDB, Dart, Flutter, GraphQL, Nginx

KokiCraft Network

Remote

Solo Founder, Software Engineer

2014 - 2017

- Online game played by 300,000+ players. Commercially successful with monthly gameplay updates.
- Skills:** Java, MySQL, Game Engine Development, Network Programming

SELECTED PUBLICATIONS

All research with gif thumbnails: kokecacao.me?page=sanity#research. (†: Advisor. *: First-author.)

TRELLISWorld: Training-Free World Generation from Object Generators

ICLR 2026 (in review)

Hanke Chen*, Yuan Liu†, Minchen Li†

PAT3D: Physics-Augmented Text-to-3D Scene Generation

ICLR 2026 (in review)

Guying Lin, Kemeng Huang, Michael Liu, Ruihan Gao, Hanke Chen, Lyuhao Chen, Beijia Lu, Taku Komura†, Yuan Liu†, Jun-Yan Zhu†, Minchen Li†

Magic Easel: Leveraging ... Semantic Modulation in AI Creativity Support

CHI 2026 (in review)

Lia Purnamasari*, Hanke Chen*, Shivani Kannan, Joseph Ratliff, Haeyoung Kim†

MCDiffuse v1: Diffusion Modelings for Minecraft

preprint 2024

Hanke Chen*

Practical NeRFology: A Brief Commentary on Neural Radiance Fields

preprint 2023

Hanke Chen*

Extracting Cellular Location of Human Proteins Using Deep Learning

arXiv 2018

Hanke Chen*

SELECTED AWARDS & HONORS

- 1st Place in the World (Soloed)**, Kaggle Histopathologic Cancer Detection Competition Jan 2019
- Frank Brunckhorst Presidential Scholarship (1%-2% in University)** ×3 times, CMU 2020-2023
- Regina Gouger Miller Art Scholarship**, CMU 2020-2021
- Anna Ophelia Dowden Award (4 Students in School of Art)**, CMU 2021

TEACHING & CONSULTING & SERVICE

- Instructor:** CMU StuCo 98-205 - Introduction to Minecraft: S23, F23, S24, F24, S25, F25, S26
- Consulting:** Gerson Lehrman Group, Inc., @ Tegus, Inc.
- Reviewer:** Computer&Graphics

Last Update: Dec. 2025