

Connor Zhizhen Lin

Education

- 2020–Present **PhD in Computer Science**, *Stanford University*, Stanford, CA.
Advisors: Leonidas Guibas, Gordon Wetzstein
Stanford Graduate Fellow (David Cheriton)
- 2018–2019 **MSc in Computer Science**, *Carnegie Mellon University*, Pittsburgh, PA.
Advisor: Keenan Crane
Thesis: Periodic Conformal Parameterization
- 2015–2018 **BSc in Computer Science**, *Carnegie Mellon University*, Pittsburgh, PA.

Experience

- 2023 **PhD Student Researcher**, *Google Research*, Mountain View, CA.
 - Researched new method for representing 3D humans and objects with dynamic Gaussians on the 3D Scene Understanding team within Perception.
- 2022–2023 **PhD Research Intern**, *NVIDIA Research*, Toronto.
 - Developed a method for single-shot 3D reconstruction and animation of neural avatars (SIGGRAPH 2023) that combines implicit SDF representations with explicit UV-parameterized texture maps.
- 2021 **PhD Research Intern**, *Adobe Research*, London.
 - Developed NeuForm (NeurIPS Oral 2022), a hybrid approach combining overfitting and general priors for neural scene editing.
- 2019–2020 **Software Engineer**, *Google*, Mountain View, CA.
 - Researched and prototyped end-to-end solutions for real-time depth inference and improved performance of depth inference in Portrait mode.
- 2018 **Software Engineering Intern**, *Google Daydream*, New York, NY.
 - Implemented a virtual reality plugin for Unity using C# and C++ that dynamically recognizes and morphs user virtual handwriting into text.
- 2017 **Software Engineering Intern**, *Yahoo!*, Sunnyvale, CA.

Skills Python, C++, MATLAB, Git

Research and Teaching

Research Interests

- I am interested in learning priors and neural representations for 3D reconstruction, generation, and editing of objects and scenes, and how these techniques can be applied to human avatars.

Teaching Experience

- Teaching Assistant (Fall 2023). Computer Graphics: Animation and Simulation (CS248B)
- Teaching Assistant (Fall 2017, Fall 2018, Spring 2019). Computer Graphics (15-462/15-662)
- Teaching Assistant (Spring 2017). Principles of Imperative Computation (15-122)

Publications

- SIGGRAPH 2023 **Single-Shot Implicit Morphable Faces with Consistent Texture Parameterization.**
C. Z. Lin, K. Nagano, J. Kautz, U. Iqbal, L. Guibas, G. Wetzstein, S. Khamis

- NeurIPS 2022 **NeuForm: Adaptive Overfitting for Neural Shape Editing.** *C. Z. Lin, N. J. Mitra, G. Wetzstein, L. Guibas, P. Guerrero*
(Oral)
- ECCVW 2022 **3D GAN Inversion for Controllable Portrait Image Animation.** *C. Z. Lin*, D. B. Lindell*, E. R. Chan, G. Wetzstein*
(Learn3DG)
- CVPR 2022 **EG3D: Efficient Geometry-aware 3D Generative Adversarial Networks.** *E. R. Chan*, C. Z. Lin*, M. A. Chan*, K. Nagano*, B. Pan, S. D. Mello, O. Gallo, L. Guibas, J. Tremblay, S. Khamis, T. Karras, G. Wetzstein*
(Oral)
- SIGGRAPH 2021 **ACORN: Adaptive Coordinate Networks for Neural Representation.** *J. N. P. Martel*, D. B. Lindell*, C. Z. Lin, E. R. Chan, M. Monteiro, G. Wetzstein*
- Masters Thesis **Periodic Conformal Parameterization.** *SCS Technical Report Connor Zhizhen Lin*

Talks

- Aug. 2023 **Single Shot Implicit Morphable Faces** *SIGGRAPH* Conference Talk
- Mar. 2023 **Neural Avatars from a Single Image** *Netflix* Invited Research Talk
- Nov. 2022 **Local Neural Shape Editing** *NeurIPS* Conference Talk
- Jun. 2022 **Advancing and Applying 3D GANs** *Stanford University* CS PhD Qualifying Exam
- Jul. 2019 **Periodic Conformal Parameterization** *Carnegie Mellon University* Masters Thesis Defense
- Dec. 2017 **Real World Fabrication of 3D Meshes** *Carnegie Mellon University* SCS Undergraduate Research Showcase

Awards

- o Stanford Graduate Fellowship (David Cheriton)
- o 5x Dean's List
- o University Honors

Service

- 2022-2023 **Reviewer** *CVPR, SIGGRAPH, SIGGRAPH Asia*
- 2022 **Stanford Club Badminton** *President*
- 2021 **Stanford CS PhD Admissions** *Committee Member*
- 2021 **Stanford Club Badminton** *Financial Officer*