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.

o PhD Student Researcher on the Perception team with Abhijit Kundu and Leonidas Guibas.

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.

o 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

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

Teaching Experience

- o Teaching Assistant (Fall 2017, Fall 2018, Spring 2019). Computer Graphics (15-462/15-662)
- o Teaching Assistant (Spring 2017). Principles of Imperative Computation (15-122)

Publications

SIGGRAPH Single-Shot Implicit Morphable Faces with Consistent Texture Parameterization.

2023 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.

(Oral) Wetzstein, L. Guibas, P. Guerrero

ECCVW 2022 3D GAN Inversion for Controllable Portrait Image Animation. C. Z. Lin*, D. B.

(Learn3DG) Lindell*, E. R. Chan, G. Wetzstein

CVPR 2022 EG3D: Efficient Geometry-aware 3D Generative Adversarial Networks. E. R. Chan*,

(Oral) **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

SIGGRAPH ACORN: Adaptive Coordinate Networks for Neural Representation. J. N. P. Martel*,

2021 D. B. Lindell*, C. Z. Lin, E. R. Chan, M. Monteiro, G. Wetzstein

Masters **Periodic Conformal Parameterization.** *SCS Technical Report* Connor Zhizhen Lin Thesis

Talks

June 2022 Advancing and Applying 3D GANs Stanford University CS PhD Qualifying Exam

July 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
- 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