Connor Zhizhen Lin

Education

2020-Present **PhD in Computer Science**, Stanford University, Stanford, CA.

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.

Minor in Robotics

Selected Coursework: Computer Graphics, Discrete Differential Geometry, Computational Photography (PhD), Machine Learning (PhD), Graduate Artificial Intelligence, Knowledge-Based Deep Learning, Computer Systems, Distributed Systems

Experience

2019-2020 **Software Engineer**, *Google*, Mountain View, CA.

- Developing mobile computational photography with the Android and Pixel Camera Algorithms team under Dr. Chia-Kai Liang.
- o Improving the performance and quality of depth mapping and 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.
- \circ Prototyped an augmented reality android app in Unreal Engine using C++ that also understands and morphs user handwriting on planar surfaces.

2017 **Software Engineering Intern**, *Yahoo!*, Sunnyvale, CA.

- Implemented an assistant Kik bot in Scala to direct chats with users and an image processing service that manipulates user images.
- Developed an image processing tool in Python that automatically generates a variety of magazine covers from user images using dlib and OpenCV for face and contour detection, as well as machine learning models to predict emotion.

2016 Software Quality Assurance Intern, Mettler Toledo Autochem, Columbia, MD.

- o Managed pre-production scripts to ensure product safety and intuition when deploying new code and features, primarily managed in Visual Studio and C#.
- Optimized legacy code through smoke, regression, and performance testing and detected sources of error prone features from newer updates.

Skills C, C++, Python, MATLAB, Java, Git

Research and Teaching

Computer Graphics

- I am interested in the intersection between computer graphics and machine learning. Currently, I
 am exploring how to discover and leverage structure in neural representations of 3D shapes.
- At Carnegie Mellon, I worked on 3D mesh fabrication and geometry processing algorithms for quad meshing in my undergraduate and graduate research, advised by Professor Keenan Crane.

Teaching

- \circ 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

Thesis

Masters Periodic Conformal Parameterization SCS Technical Report Connor Zhizhen Lin

Talks

July 2019 Periodic Conformal Parameterization Pittsburgh, Pennsylvania Masters Thesis Defense

Dec 2017 Real World Fabrication of 3D Meshes Pittsburgh, Pennsylvania CMU SCS Undergraduate Research Showcase

Awards

- o 2020 Stanford Graduate Fellowship in Science & Engineering
- o 5x Dean's List
- University Honors