# Cindy M. Nguyen cindyn@stanford.edu | 408-890-8149 | ccnguyen.github.io

INTERESTS | Computational photography (depth prediction, HDR, deblurring), computational imaging, computer vision, deep learning

#### **EDUCATION**

PhDStanford UniversityElectrical Engineering2019 – Expected 2024MSStanford UniversityElectrical Engineering (GPA 3.69/4.00)2019 – 2021BSStanford UniversityBioengineering (GPA 3.90/4.00)2015 - 2019

Relevant Coursework | Geometric and Topological Data Analysis, Fourier Optics, Modern Optics, Convex Optimization,

Linear Dynamical Systems, CNNs, AI/ML, Meta-Learning, Decision Making under Uncertainty, NLP

#### **EXPERIENCE**

# Adobe Research | Research Scientist Intern

June 2022 - Dec 2022 | San Jose, CA

Hosted by Kevin Matzen, Simon Niklaus, and Oliver Wang. Developed a method for multi-layered monocular depth estimation.

#### RESEARCH

# Stanford Computational Imaging Lab | PhD Candidate

Sept 2019 - Present | Stanford University

Advised by Prof. Gordon Wetzstein. Building deep learning-based methods for computational imaging and photography.

#### Brian Feldman Lab | Research Assistant

Sep 2017 - Mar 2019 | Stanford University

Performed RNA-Seq analysis in mature adipocytes to identify metabolic systemic cues for diabetes.

#### Markus Schwaninger Lab | Research Assistant

July 2018 - Sept 2018 | Universität zu Lübeck, Lübeck, Germany

Investigated leptin transport across the blood-brain barrier in porcine cortical endothelial in vitro models.

#### Stanley Qi Lab | Research Assistant

Mar 2016 - Feb 2018 | Stanford University

Developed chemically-inducible CRISPR/dCas9-based dimerization systems for human chromatin 3D organization and spatiotemporal gene dynamics tracking through live cell imaging.

#### **PUBLICATIONS**

#### Diffusion in the Dark: A Diffusion Model for Low-Light Text Recognition.

Nguyen, C.M., Chan, E.R., Bergman, A.W., Wetzstein, G. arXiv, 2023.

#### Learning Spatially Varying Pixel Exposures for Motion Deblurring.

Nguyen, C.M., Martel, J.N.P., Wetzstein, G. ICCP, 2022.

# Depth from Defocus with Learned Optics for Imaging and Occlusion-Aware Depth Estimation.

Ikoma, H., Nguyen, C.M., Metzler, C.A., Peng, Y., Wetzstein, G. ICCP, 2021.

#### CRISPR-Mediated Live Imaging of Genome Editing and Transcription.

Wang, H., Nakamura, M., Abbott, T.R., Zhao, D., Luo, K., Yu, C., Nguyen, C.M., ..., Qi, L.S. Science, 2019.

### CRISPR-Mediated Programmable 3D Genome Positioning and Nuclear Organization.

Wang, H., Xu, X., Nguyen, C.M., Liu, Y., Gao, Y., Lin, X., Daley, T., Kipniss. N.H., La Russa, M., Qi, L.S. Cell, 2018.

Press: Stanford Medicine, Stanford Daily, Quanta, Science

#### **HONORS**

NSF GRFP, Generation Google Scholarship, German Academic Exchange Service Scholarship, Stanford JEDI Service Graduation Award, Stanford Bio-X Undergrad Research Fellowship, NSF Undergrad Research Fellowship, Google igniteCS Grant

## **TECHNICAL SKILLS**

Experienced | PyTorch, Python, MATLAB

Familiar | Onshape, Blender, Zemax, InkScape, ImageJ