Nam Nguyen

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Education

California Polytechnic State University, San Luis Obispo, California   January 2023 – June 2024
M.S. **Computer Science**, *With Distinction*
Advised by Prof. Jonathan Ventura

California Polytechnic State University, San Luis Obispo, California
B.S. **Computer Science,** *Summa Cum Laude*   September 2019 – December 2022

Publications

1. Nam Nguyen. Instant HDR-NeRF: Fast Learning of High Dynamic Range View Synthesis With Unknown Exposure Settings. Master's Thesis, 2024.

2. Krti Tallam, Nam Nguyen, Jonathan Ventura, Andrew Fricker, Sadie Calhoun, Jennifer O'Leary, Mauriça Fitzgibbons, Ian Robbins, and Ryan K Walter. Application of deep learning for classification of intertidal eelgrass from drone-acquired imagery. *Remote Sensing*, 15(9):2321, 2023.

Presentations

1. Nam Nguyen, Edward Du, and Jonathan Ventura. HDR-NeRF--: Learning High Dynamic Range View Synthesis With Unknown Exposure Settings. Paper. *XRNeRF: Advances in NeRF for the Metaverse Workshop, Conference on Computer Vision and Pattern Recognition (CVPR),* Vancouver, Canada, 2023.

2. Shivam Ajisa, Edward Du, Nam Nguyen, Stefanie Zollmann and Jonathan Ventura. 3D Pano Inpainting: Building a VR Environment from a Single Input Panorama. Poster. *The 31st IEEE Conference on Virtual Reality and 3D User Interfaces (IEEE VR)*, Orlando, FL, 2024.

3. Nam Nguyen, Jessica Baiza, Griffen Guizan, Camille Pawlak, Sara Arnold, Ryley Chase, Lexxie Crocker, Jenn Yost, Matt Ritter, Geoffrey A Fricker, and Jonathan Ventura. OpenCanopy: Leveraging aerial imagery and deep learning to delineate California's urban tree canopy. Poster. *Southern California Data Science Day, The 29th ACM SIGKDD Conference on Knowledge Discovery and Data Mining*, Long Beach, CA, 2023.

Experiences

Remix Inc, Computer Vision Lead   July 2024 – Present
Working on novel view synthesis methods for real-time 3D reconstruction from a live panoramic video stream, and developing an optimized web renderer for 3D live-streaming in VR headset through WebXR.

Cal Poly, San Luis Obispo, Research Scientist   July 2024 – Present
Developing novel view synthesis methods for sparse and unconstrained inputs. Helping advising undergraduate and graduate students on various 3D computer vision research topics, including 3D generation and reconstruction.

Remix Inc, Computer Vision Engineer Intern   September 2023 – March 2024
Working on novel view synthesis methods for real-time 3D reconstruction from a live panoramic video stream.

Cal Poly, San Luis Obispo, Graduate Research Assistant
3D Computer Vision Lab   May 2022 – June 2024
- Worked on extending 3D view synthesis methods to improve performance with casually captured data, including a set of unconstrainted images captured by smartphones, or a single image.

Deep Learning GIS Lab   September 2021 – June 2024
- Worked on integrating deep learning in different applications of remote sensing.

Cal Poly, San Luis Obispo, Instructional Student Assistant   January 2023 – September 2023
Assisted students with labs and class questions, and graded assignments and exams. Classes include:
- CSC 466 – Knowledge Discovery in Data   Winter 2023
- DATA 301 – Introduction to Data Science   Spring 2023
- CSC 365 – Introduction to Database Systems   Summer 2023

Services

Reviewer for WACV 2024, CVPR 2024, ECCV 2024

Guest Lecturer for CPE/EE 428 – Computer Vision   Winter 2024

Skills

Python, Numpy, Pytorch, Tensorflow, OpenCV, OpenGL, CUDA, ArcGIS, QGIS, GDAL