**Summary** I design data for post-training LLMs, especially for reasoning and agentic applications. My past research includes computer vision, 3D scene representations, and medical image analysis.

## **EDUCATION**

Ph.D. Massachusetts Institute of Technology Electrical Engineering and Computer Science Thesis: Parameterizations of Neural Fields	2020 – 2024
<b>S.M. Massachusetts Institute of Technology</b> Electrical Engineering and Computer Science, GPA: 5.0/5.0 Thesis: High fidelity medical image-to-image translation	2018 – 2020
<b>B.Sc. Yale University</b> , <i>Magna Cum Laude</i> Biomedical Engineering, GPA: 3.9/4.0	2011 – 2015
EXPERIENCE	
Scale AI ML Research Scientist	2024 – present
Google DeepMind Student Researcher, advised by Daniel Duckworth and Peter Hedman	2023 – 2024
Adobe NextCam Research Intern, advised by Jiawen Chen and Cecilia Zhang	2023 summer
Iterative Health Research Intern	2022 summer
MIT Computer Science & Artificial Intelligence Laboratory Research Assistant, advised by Polina Golland	2018 – 2024
Yale Radiology Research Lab Postgraduate Researcher, advised by Jim Duncan	2017 – 2018
PwC Analytics & Technology Consultant	2015 – 2017
Yale School of Engineering & Applied Science Research Assistant, advised by Stuart Campbell	2014 – 2015

# **JOURNAL & CONFERENCE PAPERS**

• Learning General-Purpose Biomedical Volume Representations using Randomized Synthesis

Neel Dey, Benjamin Billot, Hallee Wong, Clinton Wang, Mengwei Ren, P Ellen Grant, Adrian Dalca, Polina Golland

ICLR 2025 [Paper] [Project] [Code]

# • Implicit Representations via Operator Learning Sourav Pal, Harshavardhan Adepu, Clinton Wang, Polina Golland, Vikas Singh ICML 2024 [Paper] [Code]

Discretization Invariant Networks for Learning Maps between Neural Fields
 Clinton Wang, Polina Golland
 Transactions on Machine Learning Research 2023 [Paper] [Project] [Code]

<sup>\*</sup>equal contribution

Shape-aware Segmentation of the Placenta in BOLD Fetal MRI Time Series

Mazdak Abulnaga, Neel Dey, Sean Young, Eileen Pan, Katherine Hobgood, Clinton Wang, Ellen Grant, Esra Abaci Turk, Polina Golland

Journal of Machine Learning for Biomedical Imaging 2023 [Paper] [Code]

• Spatial-Intensity Transforms for Medical Image-to-Image Translation

Clinton Wang, Natalia Rost, and Polina Golland

IEEE Transactions on Medical Imaging 2023 [Paper] [Project] [Code]

• Pre-Trained Language Models for Interactive Decision-Making

Shuang Li, Xavier Puig, Chris Paxton, Yilun Du, <u>Clinton Wang</u>, Linxi Fan, Tao Chen, De-An Huang, Ekin Akyürek, Anima Anandkumar, Jacob Andreas, Igor Mordatch, Antonio Torralba, Yuke Zhu

NeurIPS 2022 Oral [Paper] [Project] [Code]

Deep learning—assisted differentiation of pathologically proven atypical and typical hepatocellular carcinoma (HCC) versus non-HCC on contrast-enhanced MRI of the liver

Paula Oestmann, Clinton Wang, Lynn J. Savic, Charlie A. Hamm, Sophie Stark, Isabel Schobert, Bernhard Gebauer, Todd Schlachter, MingDe Lin, Jeffrey Weinreb, Ramesh Batra, David Mulligan, Xuchen Zhang, James Duncan, Julius Chapiro European Radiology 2021 [Paper]

 Automated feature quantification of Lipiodol as imaging biomarker to predict therapeutic efficacy of conventional transarterial chemoembolization of liver cancer

Sophie Stark, <u>Clinton Wang</u>, Lynn Jeanette Savic, Brian Letzen, Isabel Schobert, Milena Miszczuk, Nikitha Murali, Paula Oestmann, Bernhard Gebauer, MingDe Lin, James Duncan, Todd Schlachter, Julius Chapiro Scientific Reports 2020 [Paper] [Code]

• Spatial-Intensity Transform GANs for High Fidelity Medical Image-to-Image Translation

Clinton Wang, Natalia Rost, and Polina Golland MICCAI 2020 [Paper] [Project] [Video] [Code]

A probabilistic approach for interpretable deep learning in liver cancer diagnosis

Clinton Wang, Charlie Hamm, Brian Letzen, James Duncan

SPIE Medical Imaging 2019 Oral [Paper] [Project] [Video] [Code]

Deep learning for liver tumor diagnosis part II: interpretable deep learning to characterize tumor features

Clinton Wang\*, Charlie Hamm\*, Marc Ferrante, Isabel Schobert, Todd Schlachter, MingDe Lin, Jeffrey Weinreb, James Duncan, Julius Chapiro, Brian Letzen

European Radiology 2019 [Paper] [Project] [Code]

 Deep learning for liver tumor diagnosis part I: development of a convolutional neural network classifier for multi-phasic MRI

Charlie Hamm\*, Clinton Wang\*, Marc Ferrante, Isabel Schobert, Todd Schlachter, MingDe Lin, James Duncan, Jeffrey Weinreb, Julius Chapiro, Brian Letzen

European Radiology 2019 [Paper] [Code]

• The Role of Artificial Intelligence in Interventional Oncology: A Primer

Brian Letzen, <u>Clinton Wang</u>, Julius Chapiro Journal of Vascular and Interventional Radiology 2019 [Paper]

 Slowing of contractile kinetics by myosin-binding protein C can be explained by its cooperative binding to the thin filament

Clinton Wang, Jonas Schwan, Stuart Campbell

Journal of Molecular and Cellular Cardiology 2016 [Paper]

#### **WORKSHOP PAPERS AND PREPRINTS**

# • EnigmaEval: A Benchmark of Long Multimodal Reasoning Challenges

Clinton Wang, Dean Lee, Cristina Menghini, Johannes Mols, Jack Doughty, Adam Khoja, Jayson Lynch, Sean Hendryx, Summer Yue, Dan Hendrycks
2025 [Paper] [Project]

# • InterNeRF: Scaling Radiance Fields via Parameter Interpolation

Clinton Wang, Peter Hedman, Polina Golland, Jonathan T. Barron, Daniel Duckworth CVPR Neural Rendering Intelligence 2024 [Paper]

# • Dynamic Neural Fields for Learning Atlases of 4D Fetal MRI Time-series

Zeen Chi\*, Zhongxiao Cong\*, <u>Clinton Wang</u>, Yingcheng Liu, Esra Abaci Turk, Ellen Grant, Mazdak Abulnaga, Neel Dey, Polina Golland

Medical Imaging Meets NeurIPS Workshop 2023 [Paper] [Code]

# Interpolating between Images with Diffusion Models

Clinton Wang, Polina Golland

ICML Workshop on Deployment Challenges for Generative AI 2023 [Paper] [Project] [Code]

## Approximate Discretization Invariance for Deep Learning on Neural Fields

Clinton Wang, Polina Golland

ICLR Workshop on Neural Fields 2023

New England Computer Vision Workshop 2022 Oral

NeurIPS Symmetry and Geometry in Neural Representations 2022 [Paper] [Video] [Code]

# • Geometry Aware Field-to-field Transformations for 3D Semantic Segmentation

Dominik Hollidt, Clinton Wang, Polina Golland, Marc Pollefeys 2023 [Paper] [Project] [Code]

# High Fidelity Medical Image-to-Image Translation with Spatial-Intensity Transforms

Clinton Wang, Natalia Rost, Polina Golland
MIT MGB AI Cures Conference 2022 [Project] [Code]

# • Automatic Segmentation of the Placenta in BOLD MRI Time Series

Mazdak Abulnaga, Sean Young, Katherine Hobgood, Eileen Pan, Clinton Wang, Ellen Grant, Esra Abaci Turk, Polina Golland MICCAI Preterm, Perinatal and Paediatric Image Analysis Workshop 2022 [Paper] [Code]

## SELECTED HONORS AND AWARDS

• Tak	reda Fellowship	2021 – 2022
• Sieł	pel Foundation Scholar	2020
• Yale	e Department of Biomedical Engineering Prize	2015
• Tau	Beta Pi Engineering Honor Society	2015
• Inte	ernational Biology Olympiad, silver medalist	2009

# **TEACHING**

#### Courses

• Teaching Assistant, 6.8300 Advances in Computer Vision, MIT	2024
• Guest Presenter, 6.4400 Intro to Computer Graphics, MIT	2022
• Teaching Assistant, 6.819/6.869 Advances in Computer Vision, MIT	2021

## **Invited Talks**

•	University of Wisconsin-Madison (Host: Vikas Singh)  Neural Fields for Representing 3D Data	2023
•	Google Brain, Toronto (Hosts: Andrea Tagliasacchi and Kevin Swersky)  Deep Learning on Neural Fields	2022
•	Boston Medical Imaging Workshop  Robust counterfactual image generation with spatial-intensity transforms	2022
•	MIT-Takeda Presentation Series  Identifying radiological biomarkers with generative models	2022

## **SERVICE**

#### **Academic Service**

- Program Committee, Medical Imaging Meets NeurIPS Workshop (MedNeurIPS)
- Reviewer
  - International Conference on Learning Representations (ICLR)
  - Conference on Neural Information Processing Systems (NeurIPS)
  - International Conference on Machine Learning (ICML)
  - Medical Image Analysis (MedIA)
  - Information Processing in Medical Imaging (IPMI)
  - Medical Image Computing and Computer Assisted Intervention (MICCAI)
  - Machine Learning for Health (ML4H)
  - Medical Imaging Meets NeurIPS Workshop (MedNeurIPS)
  - NeurIPS Workshop on Symmetry and Geometry in Neural Representations (NeurReps)
  - CVPR Workshop on AI for Content Creation (AI4CC)

## **Community Service**

• EECS PhD Admissions Reviewer, MIT

2022

- Graduate Student Advisory Group for Engineering (GradSAGE), MIT
   2019 2021

   Advised the Dean of the School of Engineering on policies and initiatives for graduate students. Developed and organized leadership workshops, a leadership minor, and a leadership certificate program.
- Controller, Sidney-Pacific Graduate Residence
   Managed internal budgeting, reimbursements, accounting, and financial reporting for MIT's largest graduate dormitory (749 students).