Chris Hoang

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EDUCATION

New York University Sep 2023 – Present

Ph.D. in Computer Science (3.97/4.00 GPA)

- Research focus: self-supervised learning, world models, video representations
- Advised by Mengye Ren

University of Michigan Sep 2016 – May 2020

B.S.E., M.S.E. in Computer Science and Engineering (4.00/4.00 GPA)

- Research focus: deep reinforcement learning, representation learning, multi-agent systems
- Advised by Honglak Lee and Michael P. Wellman

HONORS AND AWARDS

NDSEG Fellowship ($130,000 award)	2024 - 2027
Tuck & Ham-Hi Lee and Sheldon Howard & Ruth Hoff Grants ($80,000 award)	2016 - 2020
D.E. Shaw Nexus Fellowship ($1,500 award)	2018
William J. Branstrom Freshman Prize (top 5% of freshman class)	2016

PUBLICATIONS

Midway Network: Learning Representations for Recognition and Motion from Latent Dyanmics
Chris Hoang, Mengye Ren
Preprint

Discrete JEPA: Learning Discrete Token Representations without Reconstruction
Junyeob Baek, Hosung Lee, **Chris Hoang**, Mengye Ren, Sungjin Ahn
ICML 2025 Tokenization Workshop

PooDLe: Pooled and dense self-supervised learning from naturalistic videos
Alex N. Wang*, **Chris Hoang***, Yuwen Xiong, Yann LeCun, Mengye Ren
ICLR 2025

Successor Feature Landmarks for Long-Horizon Goal-Conditioned Reinforcement Learning
Chris Hoang, Sungryull Sohn, Jongwook Choi, Wilka Carvalho, Honglak Lee
NeurIPS 2021

Spoofing the Limit Order Book: A Strategic Agent-Based Analysis
Xintong Wang, **Chris Hoang**, Yevgeniy Vorobeychik, Michael P. Wellman
Games 2021

Learning-Based Trading Strategies in the Face of Market Manipulation
Xintong Wang, **Chris Hoang**, Michael P. Wellman
ICAIF 2020

EXPERIENCE

Meta, FAIR May 2025 – Present

Research Scientist Intern, Hosts: Joseph Tighe, Pierluca D'Oro

- Investigated world models, generative reward models, and test-time planning for improving computer use agents

New York University CILVR Lab Dec 2022 – Present

Research Assistant, Advisor: Mengye Ren

- Developed SSL method based on latent dynamics, first to jointly learn recognition and motion from videos
- Designed multi-object training objectives, decoder architectures, and data recipes for SSL on natural videos
- Investigated discrete VQ tokenization and latent prediction pre-training for visual reasoning and planning tasks

The Voleon Group Oct 2020 – Jan 2023

Machine Learning Engineer, Team: Systematic Equities Research

- Explored model selection, response construction, and feature engineering to improve stock return prediction
- Analyzed simulations of trading strategies to mitigate exposure to macroeconomic factors and tail-risk events

University of Michigan AI Lab Jun 2019 – Sep 2021

Research Assistant, Advisor: Honglak Lee

- Led research team to develop method that leverages a latent representation of transition dynamics to abstract high-dimensional state spaces as landmark graphs, enabling exploration and long-horizon goal-reaching

Research Assistant, Advisor: Michael P. Wellman — Dec 2017 – Jun 2019

- Formulated trading algorithms that can learn from market information in a manner robust to adversarial agents by analyzing simulations and equilibrium states of a multi-agent model of financial markets

Citadel — Jun 2019 – Aug 2019

Software Engineering Intern, Team: Equities Quantitative Research

- Developed research infrastructure, analysis tooling, and data pipelines for experimenting with real-time financial data, portfolio optimization strategies, and econometric models of market risk factors

Amazon — Jun 2018 – Aug 2018

Software Development Engineer Intern, Team: Computer Vision and Robotics

- Architected framework for executing computer vision and robotics workflows from offline learning to real-time inference, using cache-enabled task graphs and dynamic job scheduling to achieve computational scalability

TEACHING

Section Leader & Grader, Advanced Topics in Embodied Learning and Vision (*NYU, DS-GA 3001*) 2025

ADVISING

Azwar Abdulsalam, Visting Researcher, *Recurrent World Model Architectures* 2025
Yuen-Hei (Sal) Yeung, NYU MS, *Learning Embodied Representations with Latent Dynamics* 2025
Jenny Zhu, NYU GSTEM (next *AB at Harvard*), *Video Semantic Labeling* 2024

PROFESSIONAL SERVICE

Reviewer: NeurIPS 2025 (*top reviewer*), CoLLAs 2025

ADDITIONAL

Alumnus of Thomas Jefferson High School for Science and Technology
Technical Skills: Python, PyTorch, TensorFlow, R, C++, C