education Cornell University, Ithaca, NY

> M.S. in Computer Science Aug 2021 – May 2023

Advisor: Anil Damle

Aug 2018 - May 2021 B.S. in Computer Science (Honors), Summa Cum Laude

Advisor: Austin Benson

GPA: 4.14/4.30

coursework Numerical Methods (Graduate), Probability (Graduate), Statistical Distances (Graduate), Algorithms

(Graduate), Network Theory (Graduate), Computer Vision (Graduate), Machine Learning, Real Analysis,

Linear Algebra, Compilers

preprints & Edge Proposal Sets for Link Prediction 🖟 🗘

(under submission)

Abhay Singh, Qian Huang, Sijia Linda Huang, Omkar Bhalerao, Horace He, Ser-Nam Lim, Austin Benson

Combining Label Propagation and Simple Models Out-performs GNNs 🗷 🔿 (ICLR 2021)

Qian Huang, Horace He, Abhay Singh, Ser-Nam Lim, Austin Benson

Better Set Representations For Relational Reasoning 🚨 🗘

(NeurIPS 2020)

Qian Huang, Horace He, Abhay Singh, Yan Zhang, Ser-Nam Lim, Austin Benson

professional experience

publications

Citadel, Global Quantitative Strategies, Chicago, IL

Quantitative Research Intern (Incoming) June 2022 – Aug 2022

• Portfolio Optimization Team

Software Engineering Intern June 2021 – Aug 2021

Portfolio Optimization Robustness and Latency

Yext, New York, NY

Software Engineering Intern June 2020 – Aug 2020

• Application Security & Code Vulnerability

Morgan Stanley, New York, NY

Technology Summer Analyst June 2019 – Aug 2019

• Efficient Data Pipelines

teaching experience CS 4820: Introduction to Analysis of Algorithms

Head Teaching Assistant, Cornell University Aug 2021 - Dec 2021 Teaching Assistant, Cornell University Aug 2019 - Dec 2019

CS 4780: Introduction to Machine Learning

Head Teaching Assistant, Cornell University Aug 2020 - May 2021

service & leadership Cornell University Artificial Intelligence

Co-President Aug 2021 - May 2022

Reviewer:

ICLR 2022, NeurIPS 2021

projects

1-Lipschitz Deep Equilibrium Models

• Enforced uniqueness and existence of fixed-point solution from root-finding neural network

Few-Shot Instance Segmentation 🚨

• Designed architecture to perform proposal-free few-shot instance segmentation

Continual Learning with Lottery Tickets

• Demonstrated effectiveness of novel training scheme to resist catastrophic forgetting

Xi Compiler

• Wrote optimized compiler to emit x86 assembly instructions, includes dataflow analysis and nontrivial register allocation; $\sim 10,000$ lines of code