# Naimeng Ye

# **EDUCATION**

# Columbia University

NY, USA

Ph.D. in Operations Research

2022-Present

- Advisor: Hongseok Namkoong, Tianyi Peng
- Research Interest: AI agent for sequential decision-making.

# **Princeton University**

NJ, USA

B.A. in Mathematics

2018-2022

- Graduated with High Honors in Mathematics, Phi Beta Kappa, Sigma Xi Society
- Thesis: Model-Misspecified Offline Reinforcement Learning
- Advisor: Mengdi Wang

#### **PAPERS**

# 1. Speculative Actions: A Lossless Framework for Faster Agentic Systems

Naimeng Ye\*, Arnav Ahuja\*, Georgios Liargkovas\*, Yunan Lu\*, Kostis Kaffes, Tianyi Peng

Under review.

2. Differences-in-Neighbors for Network Interference in Experiments Tianyi Peng, Naimeng Ye, and Andrew Zheng ( $\alpha$ - $\beta$  order)

\* Finalist, RMP Jeff McGill Student Paper Award 2025

**ACM EC 2025** 

3. Exchangeable Sequence Models Can Naturally Quantify Uncertainty Over Latent Con-

Naimeng Ye and Hongseok Namkoong.

ICLR 2024 Workshop ME-FoMo.

Submitted to Operations Research

4. PersonalLLM: Tailoring LLMs to Individual Preferences.

Tom Zollo\*, Andrew Siah\*, Naimeng Ye, Ang Li, and Hongseok Namkoong. ICLR 2025.

5. AI Agents for Web Testing: A Case Study in the Wild.

Naimeng Ye\*, Xiao Yu\*, Ruize Xu\*, Tianyi Peng, and Zhou Yu. NeurIPS 2025 LAW Workshop

## Working **PROJECTS**

# SynthTools: A Framework for Scaling Synthetic Tools for Agent Development

with Tommaso Castellani, Daksh Mittal, Thomson Yen, and Hongseok Namkoong 2025

Sequence Models as algorithms and meta-learners

with Priyank Agrawal and Hongseok Namkoong

2025

# Adaptive tool use: scaling up post-training RL environments

with Daksh Mittal, Thomson Yen, Minghui Chen, Tommaso Castellani, Hanming Yang, and Hongseok Namkoong

#### Prior Experience

# Undergrad Thesis in Reinforcement Learning | NJ, USA

June 2021 - May 2022

with Professor Mengdi Wang of Princeton University

• Worked to develop the first gap-dependent sample complexity bound for general pessimistic algorithms in offline RL setting.

# Undergrad Researcher in Cryptography | NJ, USA

Feb 2020 - May 2021

with Professor Mark Zhandry of Princeton University

• Worked to develop a general relationship between security of cryptographic schemes with classical access to a random oracle (ROM) and schemes with quantum access to a random oracle (QROM).

# University of Chicago Mathematics REU | USA with Professor Peter May of University of Chicago

June 2020 - Sep 2020

• Wrote a expository paper "Equivariant K-theory and the Atiyah-Segal Completion

• Wrote a expository paper "Equivariant K-theory and the Atiyah-Segal Completion Theorem", supervised by Dr. Akhil Matthew and Professor Peter May.

Awards
AND
Honors

Deming Doctoral Fellowship, Columbia Business School 2025-2026
Shapiro Prize for Academic Excellence, Princeton University September 2019
Manfred Pyka Memorial Prize in Physics, Princeton University June 2019
CGMO Gold Medalist, China, July 2017

# Academic Services

Reviewer for: International Conference on Learning Representations, 2025, 2026 Reviewer for: International Conference on Artificial Intelligence and Statistics, 2026 Reviewer for: Conference on Neural Information Processing Systems, 2024

### Teaching Experience

PhD Generative AI: Technical and Social: Fall 2025

EMBA Managerial Statistics: EMBA Core, Fall 2025, Fall 2024, Fall 2023

MBA Managerial Statistics: MBA Core, Fall 2024

COS217: Introduction to Programming Systems, Spring 2020

# **SKILLS**

Languages: English, Chinese.

Programming: Python, Java, C, Solidworks.