

# Yingchen Xu

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## Education

### University College London

#### PHD COMPUTER SCIENCE

- Advisors: Dr. Edward Grefenstette, Dr. Tim Rocktäschel
- Research Interests: Deep Reinforcement Learning, Self-supervised Learning, Robotics

London, UK

Jan 2022 - present

### Rice University

#### BS COMPUTER SCIENCE, BA MATHEMATICS

- Undergraduate Research Advisor: Dr. Anshumali Shrivastava

Houston, Texas, USA

Aug 2014 - May 2018

## Professional Experience

### FAIR Labs at Meta

#### PHD STUDENT RESEARCHER

- Conduct fundamental research in deep reinforcement learning and generative AI models.

London, UK

Jan 2022 - present

### Airbnb

#### MACHINE LEARNING ENGINEER

- Built ML models for dynamic pricing and personalized content recommendations.
- Developed in-house ML infrastructures for feature engineering, model training and deployment.

San Francisco, CA, USA

Aug 2018 - Sep 2021

### LinkedIn

#### SOFTWARE ENGINEER INTERN

- LinkedIn iOS app development.

Sunnyvale, CA, USA

May 2017 - Aug 2017

### Intuit

#### SOFTWARE ENGINEER INTERN

- TurboTax web development.

San Diego, CA, USA

May 2016 - Aug 2016

## Publications

Zhengyao Jiang\*, **Yingchen Xu\***, Nolan Wagener, Yicheng Luo, Michael Janner, Edward Grefenstette, Tim Rocktäschel, Yuan-dong Tian. H-GAP: Humanoid Control with a Generalist Planner. *Foundation Model for Decision Making Workshop, NeurIPS*, 2023.

Rohan Chitnis\*, **Yingchen Xu\***, Bobak Hashemi, Lucas Lehnert, Urun Dogan, Zheqing Zhu, Olivier Delalleau. IQL-TD-MPC: Implicit Q-Learning for Hierarchical Model Predictive Control. *New Frontiers in Learning, Control, and Dynamical Systems Workshop, ICML*, 2023.

**Yingchen Xu\***, Jack Parker-Holder\*, Aldo Pacchiano\*, Philip J. Ball\*, Oleh Rybkin, Stephen J. Roberts, Tim Rocktäschel, Edward Grefenstette. Learning General World Models in a Handful of Reward-Free Deployments. *NeurIPS*, 2022.

Ari Beller, **Yingchen Xu**, Scott Linderman, Tobias Gerstenberg. Looking into the past: Eye-tracking mental simulation in physical inference. *Cognitive Science*, 2022.

Beidi Chen, **Yingchen Xu**, Anshumali Shrivastava. LGD: Fast and Accurate Stochastic Gradient Estimation. *NeurIPS*, 2019.

## Additional Experience

2023 **Workshop Organizer**, Agent Learning in Open-Endedness Workshop at NeurIPS

2023 **Mentor**, MSc Research Project in Offline Reinforcement Learning, University College London