# Xingyue Huang

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### Education

University of Oxford (Expected graduation 01/2027)

09/2023 – Present

DPhil in Computer Science

Oxford, United Kingdom

Supervised by DeepMind Chair of AI Prof. Michael Bronstein and Prof. İsmail Ceylan

University of Oxford

09/2019 - 06/2023

MMathCompsci in Mathematics and Computer Science

Oxford, United Kingdom

Graduated with Distinction

## Selected Publications

First Author of HYPER: A Foundation Model for Inductive Link Prediction with Knowledge Hypergraphs First foundation model for link prediction with knowledge hypergraphs **Under Review** 

Co-First Author of Flock: A Knowledge Graph Foundation Model via Learning on Random Walks

Knowledge graph foundation model with probabilistic node-relation equivariance

**Under Review** 

First Author of Loong: Synthesize Long Chain-of-Thoughts at Scale through Verifiers NeurIPS 2025 LAW A framework for synthetic data generation and verification across a diverse range of reasoning-intensive domains.

First Author of Distilling Tool Knowledge into Language Models via Back-Translated Traces ICML 2025 MAS A systematic pipeline to distill tool-integrated-reasoning traces to LLM for better CoT perforance

First Author of How Expressive are Knowledge Graph Foundation Models?

ICML 2025

Expressivity study of knowledge graph foundation model and developing framework equipped with arbitrary motifs

First Author of Link Prediction with Relational Hypergraphs

**TMLR** 

Applying conditional message passing for link prediction on fully relational data with expressiveness quarantee

Author of Cooperative Graph Neural Networks

ICML 2024

A dynamic and flexible message-passing paradigm in which each node can choose a different communication strategy

First Author of A Theory of Link Prediction via Relational Weisfeiler-Leman on Knowledge Graph NeurIPS 2023 Theoretical expressiveness study for advanced link prediction models on knowledge graphs

# Professional Experience

Snap Inc.

06/2025 - 10/2025

Bellevue, United States

London, United Kingdom

Research Intern

- Research Intern in User Modeling & Personalization (UMaP) Research Team, focusing on language modeling.
- Researched in sparse attention to alleviate attention dispersion for long-context understanding of LLM.
- Investigated methods for adapting large language models to generate embeddings for retrieval tasks

Eigent-AI

Research Intern

10/2024 - 06/2025

- Contributing to the open-source multi-agent framework, CAMEL-AI, reached first place in Github Trending.
- Led the data generation project to distill mathematical tool-use capabilities with SFT via backtranslation.
- Contributed to the open-source project *Loonq*, focused on generating verifiable reinforcement learning workflows.

Alibaba Group

07/2021 - 09/2021

#### Machine Learning Engineer Intern

- Hangzhou, China
- Developed an object detection system for video subtitle-detection with Faster-RCNN model
- Conducted semantic analysis on OCR-detected titles to assess the quality of video descriptions
- Improved accuracy of object detection and classification by 10% and were incorporated into production