

Xinyue Hao

36 Buccleuch Place, Edinburgh, United Kingdom, EH8 9JS

☎ +44 7354447249 ✉ maggie.hao812@gmail.com 🎓 [Google Scholar](#) [linkedin](#)

Research Interest

Improving **efficiency** in visual tasks, particularly **video understanding**.

- **Training stage:** dataset pruning, coreset selection
- **Inference stage:** token selection

Education

The University of Edinburgh

Sep. 2022 – Present

Ph.D. in Centre for Doctoral Training in Robotics and Autonomous Systems

Edinburgh, UK

Supervisors: Prof. Laura Sevilla-Lara, Prof. Robert Fisher

The University of Edinburgh

Sep. 2020 – Aug. 2021

M.Sc in Artificial Intelligence

Edinburgh, UK

Course GPA: Distinction

Supervisor: Prof. Hakan Bilen

Thesis: Informative Novelty Detection for Visual Object Recognition

Beijing University of Posts and Telecommunications

Sep. 2016 – Jun. 2020

Queen Mary University of London

B.Eng in Telecommunications Engineering with Management (Joint Bilingual Program)

Beijing, China

Overall GPA: 89/100 (Top 5%)

Publications

[1] **It's a Matter of Time: Three Lessons on Long-Term Motion for Perception.**

Willem Davison, **Xinyue Hao**, Laura Sevilla-Lara

Under Review, 2026.

[2] **Progressive Data Dropout: An Embarrassingly Simple Approach to Faster Training.**

Shriram M S*, **Xinyue Hao***, Shihao Hou, Yang Lu, Laura Sevilla-Lara, Anurag Arnab, Shreyank N. Gowda

Advances in Neural Information Processing Systems (NeurIPS), 2025.

[3] **Principles of Visual Tokens for Efficient Video Understanding.**

Xinyue Hao, Gen Li, Shreyank N. Gowda, Robert B. Fisher, Jonathan Huang, Anurag Arnab, Laura Sevilla-Lara

International Conference on Computer Vision (ICCV), 2025.

[4] **Watt for what: Rethinking deep learning's energy-performance relationship.**

Shreyank N. Gowda, **Xinyue Hao**, Gen Li, Shashank Narayana Gowda, Xiaobo Jin, and Laura Sevilla-Lara

European Conference on Computer Vision Workshop (ECCV Workshop), 2024.

[5] **OpenLORIS-Object: A robotic vision dataset and benchmark for lifelong deep learning.**

Qi She, Fan Feng, **Xinyue Hao**, Qihan Yang, Chuanlin Lan, Vincenzo Lomonaco, Xuesong Shi et al.

IEEE international conference on robotics and automation (ICRA), 2020.

Work & Intern Experience

Alibaba

Jan. 2022 – Jul. 2022

Algorithm Engineer

Beijing, China

- Responsible for improving the pre-ranking algorithm in Lazada's advertisement recommendation system.

ByteDance

Aug. 2021 – Dec. 2021

Research Intern

Beijing, China

- Responsible for improving the personalized ranking algorithm in the Douyin advertising recommendation system.

Professional Service

- **Conference Reviewer:** CVPR, ECCV

- **Teaching Assistant (MSc courses):** Machine Learning Practical, Applied Machine Learning, Computer Vision