HARRY COPPOCK

Research Scientist | 10 Downing Street Fellow | Visiting Lecturer
PhD, HEA Fellow, PGCert, MSc and MEng

harrygcoppock@gmail.com https://harrycoppock.com Google Scholar
www.linkedin.com/in/harry-coppock

EMPLOYMENT

Research Scientist
The UK AI Security Institute (AISI) Nov 2023 - present

I was the first technical hire at AISI. Alongside helping to establish the organisation, I researched, developed, and implemented new evaluation methods for emerging AI capabilities. I built AISI's evaluation capacity from the ground up and have evaluated 20+ frontier models pre-deployment since November 2023. I have also contributed to several open-source AI evaluation tools, including Inspect and hibayes .

10 Downing Street Fellow (Deputy Director)
10 Downing Street Nov 2023 - present

In this role, I advise on and lead AI projects that address Prime Minister priority issues. My working day consists of meetings with ministers and key civil service stakeholders, directing technical and delivery teams, and hands-on research and engineering. Past projects include investigating failure mechanisms in automated LLM medication reviews, teaching Keir Starmer to code and delivering educational sessions at Heads of Departments away days.

Independent Review on NHS AI Preparedness
NHS May 2026 - present

I have been commissioned by the Permanent Secretary of the Department of Health and Social Care to conduct a rapid review of the NHS's AI preparedness. Given current and forecast AI capabilities, the review examines the main blockers to ensuring that the National Health Service maximally benefits from this technology.

Visiting Lecturer in Deep Learning
Imperial College London Dec 2023 - present

Lecture in the Department of Computing, for Deep Learning 70010 and Ethics, Fairness and Explanation in AI 70076. Topics include generative models, attention mechanisms, AI evaluation, and efficient training and inference. Example lecture notes for efficient deep learning.

Founder
Maat May 2023 - Nov 2023

I founded Maat, an AI due diligence consultancy helping organisations assess the quality of AI in M&A deals. We developed evaluation suites and best practices, hired two employees, and secured clients including Pfizer, Candesic, and VCs. Maat closed in November 2023 with positive net cash flow to avoid conflict of interest with my new government role.

Research Scientist
The Alan Turing Institute 2021 - 2023

40% secondment, evaluating the potential of bioacoustic analysis as a digital mass test for COVID-19, which had been widely promoted in the academic literature. I conducted a nationwide study and disproved the technology.

AWARDS

- Awarded for my **technical expertise and contributions to the UK AI Security Institute**, following nomination and a review panel.
- Winner of the Berkeley AgentX – LLM Agent Competition
- Imperial College London **Faculty of Engineering Graduate Teaching Assistant (GTA) of the Year Award – Runner-up**, as chosen by an interdisciplinary review panel evaluating each department's nominee.
- **Imperial College London's annual Award for Well-Being** for my contributions to improving and promoting well-being in the Department of Computing. 2023
- Nominated for**The Old Centralian's Trust: John and Francis Jones Prize for Postgraduate Students in Engineering**. This prize is awarded to the postgraduate student who has made the best all-round contribution to the College. 2023
- Nominated for **Imperial College London's Award for Outstanding Achievement** for my work during the pandemic and my positive impact on the department's working environment. 2023
- **AIHACK 2022 challenge winners**. Our team of four won with a solution based on Generative Hamiltonian Neural Networks for microfluidic dynamics modelling. 2022
- **Best Student Paper** award at IEEE CBMS. 2021
- Imperial College London's **Distinguished Individual Project Prize** for work on Vector Quantised-Variational Autoencoders (VQ-VAEs) for Representation learning. 2020
- The University of Manchester's **Outstanding Academic Achievement** award, awarded to 0.5% of the graduating cohort to recognise exceptional academic achievement. 2019
- The Faculty of Engineering Prize for **highest performance in Years 1, 2, 3, and 4**. 2016, 2017, 2018, 2019
- **The Tin Plate and Rolls-Royce Prize** for top performance in third year. 2018
- **The Robert Warner Scholarship**, a national scholarship for academic excellence in Materials Science and Engineering. 2017
- The Faculty of Engineering Prize for **Outstanding Home and Overseas Application**. 2015
- The Captain's Prize for my service as Head Boy at QEH School. 2014

EDUCATION

Artificial Intelligence (PhD)

Imperial College London

Oct 2020 – Nov 2023 | London, UK

My work focused on characterising and controlling for bias in high-dimensional medical deep learning settings and self-supervised learning objective functions for auditory inference.
Supervisor: Prof. Björn Schuller.
Examiners: Prof. Guy J. Brown, Prof Lucia Specia

Postgraduate Certificate in Higher Education (PGCert)

Imperial College London

Oct 2021 – June 2022 | London, UK

An advanced postgraduate qualification, taught and assessed at the level of a UK master's degree with the aim of improving teaching standards in higher education.

Artificial Intelligence (MSc)

Imperial College London

Sept 2019 – Sept 2020 | London, UK

Distinction (82%) with **Distinguished** Individual Project
Course content: Reinforcement learning, Introduction to Machine Learning, Mathematics for Machine learning, Symbolic AI, Python programming, Natural Language Processing, Deep Learning, Machine Learning for Imaging, AI Ethics and Privacy, Software Engineering group project and an Individual Research project.

Materials Science and Engineering (MEng)

The University of Manchester

2015 – 2019 | Manchester, UK

1st (84%) finishing **top of the year** every year throughout 4 year course
Specialised in nanotechnology, solid state physics (solar cells and computer transistors) and composite + nanocomposite mechanics.

Secondary School

Queen Elizabeth's Hospital School, Bristol

2007 – 2014 | Bristol, UK

Head Boy, **A2**: A*A*A, **GCSE**: 8A*s 1A 1B

SELECTED PUBLICATIONS

Open-world evaluations for measuring frontier AI capabilities

Sayash Kapoor, Peter Kirgis, Andrew Schwartz, Stephan Rabanser, J.J. Allaire, Rishi Bommasani, **Harry Coppock**, et al.

arxiv | 2026

Quantifying Frontier LLM Capabilities for Container Sandbox Escape

Rahul Marchand, Art O Cathain, Jerome Wynne, Philippos Maximos Giavridis, Sam Deverett, John Wilkinson, Jason Gwartz, **Harry Coppock**

ICML | 2026 | ★ Oral

A Real-World Evaluation of LLM Medication Safety Reviews in NHS Primary Care

Oliver Normand, Esther Borsi, Mitch Fruin, Lauren E Walker, Jamie Heagerty, Chris C. Holmes, Anthony J Avery, Iain E Buchan, **Harry Coppock**

arxiv | 2025

Seven steps for log analysis in AI systems

Magda Dubois, Ekin Zorer, Maia Hamin, Joe Skinner, Alexandra Souly, Jerome Wynne, **Harry Coppock**, et al.

TechRxiv | 2026

Skewed Score: A statistical framework to assess autograders

Magda Dubois*, **Harry Coppock***, Mario Giulianelli, Timo Flesch, Lennart Luettgau, Cozmin Ududec

ICML 2025

Establishing Best Practices for Building Rigorous Agentic Benchmarks

Yuxuan Zhu, Tengjun Jin, Yada Pruksachatkun, Andy Zhang, Shu Liu, Sasha Cui, Sayash Kapoor, Shayne Longpre, Kevin Meng, Rebecca Weiss, Fazl Barez, Rahul Gupta, Jwala Dhamala, Jacob Merizian, Mario Giulianelli, **Harry Coppock**, Cozmin Ududec, Jasjeet Sekhon, Jacob Steinhardt, Antony Kellerman, Sarah Schwettmann, Matei Zaharia, Ion Stoica, Percy Liang, Daniel Kang

Advances in Neural Information Processing Systems 2025

HiBayES: A Hierarchical Bayesian Modeling Framework for AI Evaluation Statistics

Lennart Luettgau*, **Harry Coppock***, Magda Dubois, Christopher Summerfield, Cozmin Ududec

ICML, Statistical Frameworks for Uncertainty in Agentic Systems Workshop 2025

Audio-based AI classifiers show no evidence of improved COVID-19 screening over simple symptoms checkers

Harry Coppock, George Nicholson, Ivan Kiskin, Vasiliki Koutra, Kieran Baker, Jobie Budd, Richard Payne, Emma Karoune, David Hurley, Alexander Titcomb, Sabrina Egglestone, Ana Tendero Cañadas, Lorraine Butler, Radka Jersakova, Jonathon Mellor, Selina Patel, Tracey Thornley, Peter Diggle, Sylvia Richardson, Josef Packham, Björn W. Schuller, Davide Pigoli, Steven Gilmour, Stephen Roberts, Chris Holmes

Nature Machine Intelligence 2023

Synthia's Melody: A Benchmark Framework for Unsupervised Domain Adaptation in Audio

Cynthia Lin, Charles Jones, Björn W. Schuller, **Harry Coppock**

NeurIPS workshop + ICASSP 2023

Audio Barlow Twins: Self-Supervised Audio Representation Learning

Jonah Anton, **Harry Coppock**, Pancham Shukla, Björn W Schuller

ICASSP 2023 2023

COVID-19 detection from audio: seven grains of salt

Harry Coppock, Lyn Jones, Ivan Kiskin, Björn W Schuller

The Lancet Digital Health 2021

End-2-End convolutional neural network enables COVID-19 Detection from Breath & Cough Audio: a pilot study

Harry Coppock, Alexander Gaskell, Panagiotis Tzirakis, Alice Baird, Lyn Jones, Björn W Schuller

BMJ innovations 2021

OTHER

Shepherd

2014-present

Spend my holidays and spare time herding and milking sheep, making cheese, topping the fields for hay, helping with sheep care such as vaccination and carrying out manual labour such as fencing and assisting with the general up keep of the family farm.

AISI ML Reading group

2024-present Organiser 30

I run the weekly ML reading group at AISI.

The PhD Equality, Diversity and Culture Representative

2021-2023 Representative Role

In this role, I represented all PhD students in the Department of Computing acting as an Ally, working to ensure that all voices were heard, and campaigned for a more diverse future for the department.

The 1^{st} and 2^{nd} African Caribbean Hackathon (AC-HACK)

2022-2023 Lead Organiser 100

Through my role as the PhD EDI representative and in collaboration with the African Caribbean Society, with the goal of encouraging more Afro-Caribbean students to apply to Imperial to pursue both undergraduate and postgraduate degrees, we set up and ran the first AC-HACK. Here Afro-Caribbean students competed in a series of computer science challenges. Speakers: Shakir Mohamed and Maggie Aderin-Pocock. I have now stepped back as lead organiser and assist through an advisory role. Please see the news story.

Weekly Departmental Socials

2020-2023 Lead Organiser 150+

To improve the social life in the department of computing and to increase the number of people visiting campus following the pandemic, I set up and ran the ‘The Social Committee’. Through this committee, we ran weekly socials known as ‘Pizza Fridays’ where PhD students, staff were invited for drinks and pizza every Friday. This was a hugely successful initiative often cited in departmental reviews.