

# Ben Sanati

PhD Student

## Research Interests

My interests lie in the theoretical foundations of machine learning and probability theory, with a focus on developing principled approaches to learning under uncertainty. My work explores continual learning, bounded rationality, and subjective perspectives on probability and decision theory. I also have a broader interest in epistemology, particularly concerning how beliefs are formed and updated.

## Education

2024–2028 **Ph.D in Machine Learning Systems**, University of Edinburgh.

Advisors: David Abel, Amos Storkey.

2019–2023 **MEng Electronic Engineering with AI**, University of Southampton.

Thesis Advisors: Jonathon Hare, Geoff V. Merrett

First Class Honours

## Professional Experience

03/24–07/24 **Senior Research Assistant**, UNIVERSITY OF SOUTHAMPTON.

Selected as the only associate on a £25k Innovate UK-funded project for an industry client, developing a mobile 3D SLAM system and presenting technical results with strategic insights to stakeholders.

07/23–09/23 **Data Science Intern**, CIRIUM, RELX GROUP.

Awarded a Data Science internship following my team's success in a machine learning hackathon. Applied spatiotemporal machine learning techniques for aviation time-series forecasting on large-scale datasets.

06/22–09/22 **Undergraduate Research Scholar**, UNIVERSITY OF SOUTHAMPTON.

Awarded a £5k scholarship to research efficient computer vision algorithms.

## Awards

2024 EPSRC Machine Learning Systems Scholarship

2022 Undergraduate Research Scholarship

## Publications

### Forgetting is Everywhere

*Ben Sanati, Thomas L. Lee, Trevor McInroe, Aidan Scannell, Nikolay Malkin, David Abel, Amos Storkey.*  
arXiv preprint.

## Reviews

2025 Finding the Frame, RLC

## Talks

2025 ANC Workshop, University of Edinburgh