

# AI for Science Summit

Tuesday 9 December 2025 and Wednesday 10 December 2025

## Posters

### 1. Building Emotional Intelligence into Agentic-AI Systems

Sam Nallaperuma-Herzberg, Assistant Research Professor  
Department of Computer Science and Technology, University of Cambridge

### 2. Human–Algorithm Interactions and Analytical Creativity: An Experimental Approach

Dequn Teng, PhD Student  
Department of Engineering, University of Cambridge

### 3. The California AI Compass: Mapping Public Attitudes to People-Centred Regulation

Daniel Stone, Executive Director / Research Associate  
School of Humanities and Social Sciences, University of Cambridge

### 4. AI-Driven MEMS Acoustic Sensors

Mohammad Zaid, PhD Student  
Department of Engineering, University of Cambridge

### 5. AI in Classification of Dementia

Mariana Silva, PhD Student  
Department of Clinical Neuroscience, University of Cambridge

### 6. AI for Urban Development: PLATO (Platform for Land-use Analysis and Transparent Outcomes)

Jerry Chen, Isaac Newton Trust Fellow  
Department of Land Economy, University of Cambridge

### 7. Demystifying Cost-Efficiency in LLM Serving over Heterogeneous GPUs

Eiko Yoneki, Assistant Research Professor  
Department of Computer Science and Technology, University of Cambridge

### 8. Neural Reasoning for Sure Through Constructing Explainable Models

Tiansi Dong, Visiting Fellow  
Department of Computer Science and Technology, University of Cambridge

### 9. AI-enabled Insights into Galaxy Evolution

Sinan Deger, Postdoctoral Researcher  
Institute of Astronomy, University of Cambridge

### 10. Machine learning predictors for TADF photoluminescence wavelengths from text mined experimental data

Dingyun Huang, Research Associate  
Department of Physics, University of Cambridge

### 11. Heatwave impacts on population health: an agent-based modelling simulation study

Yuanfei Liu, PhD Student  
Department of Psychiatry, University of Cambridge

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### **12. Towards Real-Time Prediction with Autoencoders**

Elise Özalp, PhD Student  
Aeronautics, Imperial College London

### **13. Spatio-temporal categorical model emulation using Deep Gaussian Processes**

Bertrand Nortier, Research Software Engineer (Research Associate)  
School of Computing and Mathematical Sciences, University of Leicester

### **14. Koopman Autoencoders for PDE forecasting**

Rares Grozavescu, PhD Student  
Department of Engineering, University of Cambridge

### **15. Combining learning and physics-based modelling for tissue oximetry via spectral imaging**

Kenton Kwok, PhD Student  
Department of Chemical Engineering and Biotechnology, University of Cambridge

### **16. The APEX project - Artificial Intelligence for Policy Excellence in the Climate Crisis: initial results and outlook**

Francisco Pereira, Professor  
Department of Technology, Management and Economics, Technical University of Denmark

### **17. Generative modeling for Forecasting Dynamics**

Kyriakos Flouris, Group Leader  
School of Clinical Medicine, University of Cambridge

### **18. AI-ready Scientific Datasets Evaluation**

Victoria Wang, Strategy Lead  
Standards Association, IEEE

### **19. Green AI: Pathways to Sustainable Intelligence**

Surbhi Goel, Research Software Engineer  
University Information Services, University of Cambridge

### **20. Past, present, and future of reef distributions mapped through machine learning**

Orlando Timmerman, PhD Candidate  
Department of Earth Sciences, University of Cambridge

### **21. LUMEN—A deep learning pipeline for analysis of the 3D morphology of the cerebral lenticulostriate arteries from time-of-flight 7T MRI**

Rui Li, PhD student  
Department of Clinical Neurosciences, University of Cambridge

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### **22. Concept-Based Interpretable Underperforming Groups Discovery**

Yael Konforti, PhD Student

Department of Computer Science and Technology, University of Cambridge

### **23. BG4Sea: Groundwork for Machine-Learned Multivariate Seasonal Biogeochemical Forecasting**

Gabriela Martinez Balbontin, PhD student

LIP6, Sorbonne University

### **24. VeloTrace Reconciles Divergent Velocity and Trajectory in Single-cell Transcriptomics with Deep Neural ODE**

Hui Cheng, PhD Student

Gurdon Institute, University of Cambridge

### **25. A Suitable and Interpretable Methodology for FTIR Spectral Classification**

Thomas Hartigan, MPhil Student

Department of Physics, University of Cambridge

### **26. Graph Generative Models for Optical Network Design**

Akanksha Ahuja, PhD Student

Department of Engineering, University of Cambridge

### **27. Neural Event-triggered Control for Optimal Scheduling**

Jingdong Zhang, Chapman-Schmidt AI in Science Postdoctoral Fellow

I-X and Department of Mathematics, Imperial College London

### **28. Correcting Systemic Retrieval Biases in Ship Tracks**

Iarla Boyce, PhD Student

Department of Engineering, University of Cambridge

### **29. PhD Student or Early Career Researcher? Opportunities to get involved with The Alan Turing Institute**

Alison Wilson, Turing Liaison

Cambridge Centre for Data-Driven Discovery, University of Cambridge

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## NeurIPS@Cam Posters

### 30. Hierarchical Concept-based Interpretable Models

Oscar Hill, PhD Student

Department of Computer Science and Technology, University of Cambridge

### 31. TabStruct: Measuring Structural Fidelity of Tabular Data

Xiangjian Jiang, PhD Student

Department of Computer Science and Technology, University of Cambridge

### 32. GPGreen: Learning Linear Operators with Gaussian Processes

Tom Cowperthwaite, PhD Student

Department of Applied Maths and Theoretical Physics, University of Cambridge

### 33. Towards Generalizable Retina Vessel Segmentation with Deformable Graph Priors

Shangqi Gao, Research Associate

Department of Oncology, University of Cambridge

### 34. When is a system discoverable from data?

Zakhar Shumaylov, PhD Student

Department of Applied Maths and Theoretical Physics, University of Cambridge

### 35. Neural Network-enabled Domain-consistent Robust Optimisation for Global CO2 Reduction Potential of Gas Power Plants

Waqar Ashraf, Postdoctoral Researcher

Department of Architecture, University of Cambridge

### 36. How Intrinsic Motivation Shapes Learned Representations in Decision Transformers: A Cognitive Interpretability Analysis

Giovanna Maria Dimitri, Tenure Track Research Assistant

Social and Political Science, University of Milan

### 37. Stroke Patches: Customizable Artistic Image Styling Using Regression

John Bronskill, Research Associate

Department of Engineering, University of Cambridge

### 38. PILA: Physics Informed Low Rank Adaptation for Interpretable Earth Observation

Yihang She, PhD Student

Department of Computer Science and Technology, University of Cambridge



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