Oscar Krane

WE ARE ENGAGEMENT

EVENT PROGRAMME

Wednesday 13th & Thursday 14th May

EXCELLENCE IN AI AND MACHINE LEARNING

Department of Health & Social Care | Medicines & Healthcare products Regulatory Agency | Rolls-Royce | Government Commercial Function | fscs Financial Services Compensation Scheme | NHS The Royal Wolverhampton NHS Trust

Lincoln Bishop University | NHS Barking, Havering and Redbridge University Hospitals NHS Trust | NHS Royal National Orthopaedic Hospital NHS Trust | NHS University College London Hospitals NHS Foundation Trust

Recent research conducted by Oscar Krane has shown that on average 88% of industry leaders across both the public and private sector believe that the use of AI and Machine Learning will increase over the next 18 months.

It has the ability to touch and improve many areas within organisations, both its internal efficiency and the user experience, but a lot is still unknown and many are questioning exactly what the potential impact could have. The concerns are wide ranging from cyber security and potential bias to job displacement and integration with legacy systems. This has lead many to ask, what role does AI and Machine Learning have to play and how do we get the best of it?

This topic area is constantly increasing in its importance across almost all organisations, with some more advanced than others and almost everyone keen to share their experiences, challenges and successes.

The Excellence In AI and Machine Learning will bring together strategists, implementers and users of this technology from the public and private sector to share their successes, failures, challenges and viewpoints with the hope that everyone can get the best use out of this.

Topics to be discussed include:

• Bias and Fairness • Energy Consumption • Cybersecurity Threats • Lack of Skilled Workforce • Data Privacy and Security • Ownership of Created Content • Robustness and Generalization • Explainability and Transparency • Integration with Legacy Systems • Ethical Use in Sensitive Domains • Regulatory and Ethical Frameworks • Scalability and Real-time Processing • Job Displacement and Economic Impact

Oatlands Park Hotel
146 Oatlands Dr,
Weybridge KT13 9HB

WEDNESDAY 13TH MAY

15:00 – 18:00 HOTEL CHECK-IN AND FREE TIME

18:45 – 19:30 REGISTRATION AND DRINKS RECEPTION

19:30 – 22:00 NETWORKING DINNER

THURSDAY 14TH MAY

08:15 – 08:45 REGISTRATION, TEA, COFFEE & PASTRIES

08:50 – 09:00 CHAIR'S WELCOME AND OPENING REMARKS

Lee Cramp, *Chief AI Officer / DPO / Chief Information Security Officer*

Department of Health & Social Care

09:00 – 09:30 HOW SYNTHETIC DATA CAN SUPPORT THE DEVELOPMENT OF AI MEDICAL DEVICES

- What do we mean by synthetic data?
- How can synthetic data be used for the development of AI medical devices used as clinical decision support systems including in the training and testing phases as well as bias testing?

Key questions to ask about synthetic data from a medical products regulatory perspective.

Puja Myles, *Director, Clinical Practice Research Datalink*

Medicines & Healthcare products Regulatory Agency

09:30 – 10:00 KNOW YOUR DATA

AI and Machine Learning can only be as effective, fair, and secure as the data that fuels them. Know Your Data explores why high-quality, well-governed data is the foundation for trustworthy AI—particularly at a time when organisations face rising concerns around bias, cybersecurity, explainability, and integration with legacy systems.

The session examines how incomplete, poorly understood, or weakly controlled datasets amplify risks such as discriminatory outcomes, model fragility, and regulatory non-compliance. It also highlights the operational benefits of strong data lineage, metadata, and stewardship practices, enabling scalable, energy-efficient models that behave predictably in real-world environments.

By drawing on cross-sector examples, the presentation shows how organisations can move from reactive data management to proactive data readiness, ensuring that AI initiatives are transparent, ethical, and resilient. Attendees will leave with practical steps to strengthen data foundations and unlock the full value of AI with confidence.

Adrian Polglase, *Enterprise Architect*

ROLLS ROYCE

10:00 – 10:30 CASE STUDY PRESENTATION

10:30 – 11:30 TEA, COFFEE & NETWORKING BREAK

11:30 – 12:00

QUANTUM LEAP: HOW QUANTUM COMPUTING WILL REDEFINE THE DIGITAL AND TECHNOLOGY WORLD

The era of classical computing, governed by the predictable bits of 0s and 1s, is approaching a physical plateau. As Moore's Law slows, a new frontier is emerging: Quantum Computing. This session peels back the hype to explore how harnessing the principles of quantum mechanics—superposition and entanglement—will fundamentally restructure the digital landscape. We aren't just talking about faster computers; we are talking about a paradigm shift in how we process information, secure data, and solve "impossible" problems.

We will begin by demystifying the "Quantum Advantage," explaining why quantum systems excel at high-dimensional data processing that leaves even the most powerful supercomputers paralysed. From there, the discussion moves into the immediate industrial implications. How will quantum-enhanced machine learning accelerate Big Data analytics? How does the threat of "Shor's Algorithm" necessitate a transition to post-quantum cryptography?

Beyond the technical architecture, this talk addresses the strategic timeline. Attendees will learn to distinguish between the current "Noisy Intermediate-Scale Quantum" (NISQ) era and the future of fault-tolerant systems. We will examine real-world use cases currently in development—from optimising complex supply chain logistics to simulating molecular structures for drug discovery.

By the end of this session, data professionals and technology leaders will have a clear roadmap for the "Quantum Leap," moving from theoretical curiosity to a grounded understanding of how to prepare their organisations for a post-classical world. This isn't science fiction; it is the next evolution of the digital stack.

Ravinder Singh, *Head of Digital and Systems Team*

Government Commercial Function

12:00 – 12:30

FROM POLICY TO PRACTICE: STANDING UP AI & DATA GOVERNANCE AT FSCS

AI only builds trust when it is *governed* to be *useful*. In this talk, I'll show how FSCS is turning principles into practice, standing up AI and data governance that accelerates delivery while safeguarding people's rights. I'll share a simple, repeatable operating model: how to size AI risk, embed GDPR-first controls into the data lifecycle, and keep humans *in the loop* for decisions that matter.

Attendees will see the essential artefacts (policy, risk tiers, AI/DPIA, model register, model cards), how we structure oversight (Exec, Audit & Risk, Working Group), and what "good" looks like in production (monitoring, incidents, vendor clauses). You'll leave with a pragmatic starter kit to launch or uplift AI governance in weeks not years, without slowing innovation.

- Why governance accelerates AI delivery (not just compliance)
- A GDPR-first control stack across the data lifecycle (collection to deletion)
- Risk-tiering for AI use cases and human-in-the-loop safeguards
- Operating the model: committees, roles, RACI, and assurance

Steve Wright, *Data Protection Officer*

fscs
Financial Services Compensation Scheme

12:30 – 13:00

CASE STUDY PRESENTATION

13:00 – 13:45

LUNCH

13:45 – 14:15

TEA, COFFEE & NETWORKING BREAK

14:15 – 14:45

A DIGITAL HEALTH CARE APPROACH TO IMPROVING OUTCOMES IN CARE AT THE END-OF-LIFE

Care at the end of life is fragmented and attended avoidable urgent admissions and death-in-hospital.

We have integrated data from multiple providers, applied statically valid methods to define variables that risk stratifies large populations for their mortality risk with high performance accuracy, using mixed robotic process and machine learning methods.

The outcomes, termed the "e-surprise question", are presented to clinicians as a decision support aid, for their clinical judgment, which we have shown further enhances performance metrics by pre and post Bayesian probability adjustment.

From that point, robotic process assessment, drives the completion of the required end-of-life care processes to end-of-life registration.

This compete system is thus a digitised care pathway, promoting earlier identification and proactive care planning.

We have demonstrated that: end-of-life registration rates improve, urgent care events and death-in-hospital rates fall, and hospital bed days are saved.

Baldev Singh, *Clinical Director of IT*

NHS
The Royal Wolverhampton
NHS Trust

14:45 – 15:10

LINCOLN BISHOP UNIVERSITY'S RAPID APPROACH TO AI INTEGRATION AND UTILISATION

Jonathan Lidster will discuss how Lincoln Bishop University is rolling.

Jonathan Lidster, *Chief Planning & Data Officer*

Lincoln Bishop
University

15:15 – 15:45

CASE STUDY PRESENTATION

15:45 – 16:15

TEA, COFFEE & NETWORKING BREAK

16:15 – 16:45 ETHICS IN HEALTHCARE AI – BEYOND COMPLIANCE

Are you confident in the data going into your AI systems?
Are you comfortable with how those systems might shape clinical decisions?
And are you certain they won't unintentionally widen health inequalities?

Many healthcare technologies are technically robust, contractually approved and policy-compliant — yet still leave us uneasy. That unease is rarely about bad intent; more often it reflects pace, distance and silence.

In this session, I will introduce a practical Five Pillars Model of AI Ethics in Healthcare, designed to move organisations beyond compliance checklists into structured ethical reflection. Yasser will bring a bioethics lens, grounding the discussion in autonomy, justice, beneficence and harm.

Together, we will explore not just can we implement this? — but who does it serve, who might it disadvantage, and how do we ensure ethical judgement keeps pace with innovation and why we are setting up a community to continue the discussion?

Dione Rogers, *Former Chief Nursing Information Officer*
Yasser Abdullah, *Clinical Informatics Lead*

NHS
Barking, Havering and Redbridge University Hospitals
NHS Trust

16:45 – 17:15 AI USES IN SPECIALIST NHS SERVICES

This presentation will explore the role AI plays within a specialised NHS setting including driving down wait times and increase clinician engagement time with patients.

Matt Phillips, *Chief Nursing Information Officer*

NHS
Royal National Orthopaedic Hospital
NHS Trust

17:15 – 17:45 HOW CAN AI HELP DRIVE DIGITAL TRANSFORMATION?

Stephen Cone, *Chief Medical Information Officer*

NHS
University College London Hospitals
NHS Foundation Trust

17:45 – 18:00 CHAIR'S CLOSING REMARKS AND EVENT FINISH