

EARL

conference

2025

Agenda

EARL 2025 | Enterprise Applications of the R (& Python) Language

Tuesday 14th October

08:30 to 09:00 | Networking with Tea and Coffee

09:00 to 12:30 | Morning Workshop (Stream One)

Dynamic presentations with Quarto

Myles Mitchell

Jumping Rivers



Quarto is an open-source publishing system that lets you combine text and code to create dynamic content in HTML, PDF, dashboards, and more. This workshop will show you how to create presentations that automatically update when data changes, saving you time and making your presentations more powerful.

This workshop will cover:

- Creating presentations using Quarto
- Embedding executable R/Python code
- Dynamically adding plots and tables
- Styling slides with template CSS files
- Publishing presentations to the web

Requirements:

Basic experience in R or Python. No prior knowledge of CSS, Quarto, or Markdown needed.

A cloud environment with all dependencies pre-installed will be provided.

Tuesday 14th October

09:00 to 12:30 | Morning Workshop (Stream Two)

Simulation guided Bayesian Designs using R

Lincoln Colling
Nomio



This workshop covers a basic introduction to Bayesian statistics, including a theoretical understanding of Bayesian methods, as well as hands-on activities. Participants will learn the key differences between Bayesian and frequentist approaches and discover the advantages of Bayesian methods. The workshop begins with a conceptual introduction to help build intuitions about Bayesian methods. We then work through hands-on examples in R

This workshop will cover:

- Bayesian hypothesis testing,
- How Bayesian methods solve the problem of stopping experiments early
- Bayesian regression modelling

Requirements:

No prior knowledge of Bayesian statistics is required.

A list of R packages will be shared in advance for the practical session.,

12:30 to 13:30 | Break

Tuesday 14th October

13:30 to 17:00 | Afternoon Workshop (Stream One)

Core Machine Learning Concepts in Python

Aida Gjoka

Jumping Rivers



Machine learning is a powerful tool for uncovering patterns and making predictions. This workshop blends theory, real-world case studies, and practical coding exercises to help you build foundational skills in supervised and unsupervised learning using Python.

This workshop will cover:

- Introduction to machine learning
- Regression techniques
- Model assessment and feature selection
- Classification
- Clustering

Requirements:

No prior Python experience required.

A cloud environment with pre-installed libraries will be provided. All materials will be shared via GitHub.

Tuesday 14th October

13:30 to 17:00 | Afternoon Workshop (Stream Two)

Deploying AI in R with {ellmer} and {shiny}: From Experimentation to Production

Nic Crane

Freelance R Consultant



Large language models (LLMs) are transforming workflows, but effective use in R requires careful design and deployment. This hands-on workshop introduces the {ellmer} package and shows how to integrate AI into R and Shiny applications.

This workshop will cover:

- Prompt design and engineering
- Using the {ellmer} R package
- Building LLM-powered Shiny apps
- Deploying LLM applications responsibly

Requirements:

Basic experience with R and Shiny. No prior LLM experience needed.

Code examples and exercises will be provided to reinforce key concepts.

17:00 | End of Day

Wednesday 15th October

08:30 to 09:00 | Networking with Tea and Coffee

09:00 to 10:30 | Session One | Chair: Jeremy Horne; Mic: Abbie Brookes

09:00 to 09:05 | Conference Opening Remarks | Jeremy Horne

09:05 to 09:45 | Keynote Eric Drass

09:50 to 10:30 | Keynote Rachel Keane

10:30 to 11:00 | Break

11:00 to 12:30 | Session Two

Stream One
R in Wildlife

Stream Two
Data Visualisation in R and Python

Time Chair: Charlie Homewood,
Mic: Indi Guldalian

Time Chair: Charlotte Osbourne,
Mic: Lukshana Ketheswaran

11:00 **R is for (Horse) Racing**
to Colin Magee & Jay Emerson
11:30 Doorda & Yale University

11:00 **Duck, Duck,... Dashboard!**
to Laura Mawer
11:30 Datacove

11:30 **Understanding Dog Relinquishment:**
to **Insights From Multidimensional**
12:00 **Analysis in R**
Dr Sarah Weidman & Chris Newton
Dogs Trust

11:30 **Making Hybrid-Working Work for**
to **Workers by Visualising Real-Time**
12:00 **Office Desk and Room Availability With**
Leaflet and Shiny
Luke Bandy
The Pensions Regulator

12:00 **How We Share 300 Million Wildlife**
to **Records Online for Free and What They**
12:30 **Tell Us**
Will Millard
National Biodiversity Network Trust

12:00 **Jupyter Widgets for R**
to Romain François
12:30 TA.DA

12:30 to 13:30 | Lunch

CONFERENCE CHANGES:

13:30 to 15:00 Session Three			
Stream One R For Good		Stream Two Data Science At Scale	
Chair: Jeremy Horne Mic Brandon Lodge		Chair: Alessandro Calzolari Mic: Arushi Pant	
13:30 to 14:00	Enhancing Efficiency and Creativity With Natural Language Processing and Generative AI in R Shiny Apps Katy Morgan Government Internal Audit Agency	13:30 to 14:00	Building a New Econometric Model From Scratch Cherry Tian & Christian Taylor Workspace & December19
14:00 to 14:30	Delay-Related Harm: Direct and Indirect Impacts of Boarding Medical Patients in the Emergency Department on the Urgent and Emergency Care Pathway Nick Howlett NHS	14:00 to 14:30	Bespoke GA4 Anomaly Detection With Python Zac Nash Fresh Egg
14:30 to 15:00	Lucidum: An R Shiny App to Build and Communicate Insurance Pricing Models Gary Hemming Lucidum Data Science	14:30 to 15:00	From Prototype to Production: A Brief History of a Data Project That Was Supposed to Be Simple, Became Complex, and Still Only Occasionally Falls Over Andres Baravalle On The Beach
15:00 to 15:30 Break			

CONFERENCE CHANGES:

15:30 to 17:00 Session Four			
Stream One R and Py with AI		Stream Two Fundamentals of Analytics	
Chair: Laura Mawer Mic: Sean Burton		Chair: Steve Rackley Mic: Nathan Hor	
Time		Time	
15:30 to 16:00	AI Transcription: Creating a Productionised Internal Tool Elizabeth Brown Branding Science	15:30 to 16:00	Validation of R Packages for Regulated Industries Colin Gillespie Jumping Rivers
16:00 to 16:30	Enhancing Sensory Product Testing With R, Python and Large Language Models (LLMs) Jack Westcott & Kasidit Tipayawatn MMR Research Worldwide Ltd	16:00 to 16:30	Automating the Mundane: Leveraging Python for Data Mappings and Test Data Gen James Mullan Snap Analytics
16:30 to 17:00	From Fragmentation to Transparency: Using AI to Democratise Social Care Data Amit Kohli Access Social Care	16:30 to 17:00	AI Agents in the Data Pipeline Craig West Agentic Pythonista
17:00 Closing Remarks End of Day One of EARL			
Evening Event and the Royal Pavillion - Ticket Holders Only - Tickets Available at Front Desk			

CONFERENCE CHANGES:

Thursday 16th October

08:30 to 09:00 | Networking with Tea and Coffee

09:00 to 10:30 | Session One | Chair: Jeremy Horne; Mic: Abbie Brookes

09:00 to 09:05 | Conference Opening Remarks | Jeremy Horne

09:05 to 09:55 | Panel: **Connecting the Dots: Leadership Strategies for Data-Driven Decision Making**

Hosted by Alice Dewar-Mills, Fractional on Demand
With: Jan-Aage Frydenbo-Bruvoll, Skipa
Andy Cottle, Antisana
Kate Ashworth-Brash, Freelance

09:55 to 10:25 | Lightning Talks

Chair: Abbie Brookes
Mic: Jeremy Horne

09:55 to 10:05 | **Human Side of Change**
Masha Gaganova, MGM Creative Solutions

10:05 to 10:15 | **R Wizardry: Building Capability and Community From the Bottom Up**
Stephen Price, City and Guilds

10:15 to 10:25 | **Targets and Tasks: Make Inspired Live Refresh**
Joseph Osborne, Zap-Map

10:30 to 11:00 | Break

CONFERENCE CHANGES:

11:00 to 12:30 Session Two			
Stream One Code Validation		Stream Two Simulating the World with R and Python	
Time	Chair: Grace Prior Mic: Lukshana Ketheswaran	Time	Chair: Mo Kanjilal Mic: Brandon Lodge
11:00 to 11:30	R Validation – From Theory to Practice Mike Smith Pfizer	11:00 to 11:30	Digging Into Free-Text Data in Dog Behavioural Welfare Datasets Jana Muschinski & Mel Weedon Dogs Trust
11:30 to 12:00	Creating Validated Data Pipelines With Nextflow Mark Sellors Atorus Research	11:30 to 12:00	Pythonic Pathways to Carbon Clarity: Estimating Indirect Emissions Jason Verrall The Pensions Regulator
12:00 to 12:30	Scaling Up Enterprise Data Science in R with Arrow and Parquet Nic Crane NC Data Labs	12:00 to 12:30	Simulating the Universe... With Python? Stephen Wilkins University of Sussex
12:30 to 13:30 Lunch			

CONFERENCE CHANGES:

13:30 to 15:00 Session Three			
Stream One R and Py with AI		Stream Two Statistical Modelling in R	
Time	Chair: Bethanie Lunn Mic: Arushi Pant	Time	Chair: Fiona MacNeill Mic: Alida Szeman
13:30 to 14:00	The 4th Hyperludic Accelerant: "How Can We Know Where We Are Going If We Don't Know Where We've Been?" Vincent Murphy Hyperludic Ltd	13:30 to 14:00	From R to Bar: Creating a Proof of Concept for Catering Sales Forecasts Megan Bourne Levy
14:00 to 14:30	Building a RAG System For Your Business: A Guide to Delivering Genuine Impact Gabe Musker & Cosima Calder Branding Science & Blok	14:00 to 14:30	Improving Analytics by Using Causal Inference Techniques AJ Small Sky UK
14:30 to 15:00	Classified Success: Using an LLM to Analyse Seller Calls Christopher Campbell AutoTrader	14:30 to 15:00	Why Hospitality Needs Hard Data to Make It More Human Victoria Searl & Josh Williams DataHawks
15:00 to 15:30 Break			

CONFERENCE CHANGES:

15:30 to 17:00 | Session Four

15:30 to 16:00 | Lightning Talks

Time Chair: Laura Mawer Mic: Charlie

15:30 to 15:40	Levelling-Up: An R Shiny Solution Modelling Costing Decisions for Level Crossings Dr Alison Telford, City and Guilds
----------------------	--

15:40 to 15:50	Talk To Be Confirmed Mark Webster, Principle Analyst, Paymentsshield
----------------------	--

15:50 to 16:00	DuckDB for SQL-native Data Science in Python Jamie Matthews, DabApps
----------------------	--

16:10 to 17:00 | Keynote Wes Mckinney

17:00 | End of Conference | Jeremy Horne Closing Remarks

CONFERENCE CHANGES:
