Research vs. AI: Collaboration or Crisis?

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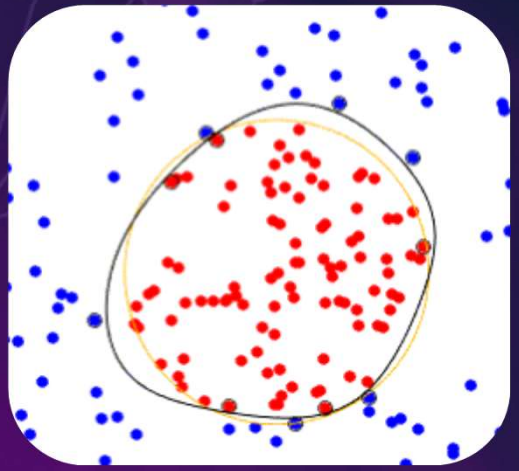
Wooclap QR Code
(START IT, JAKE!)

University of East Anglia

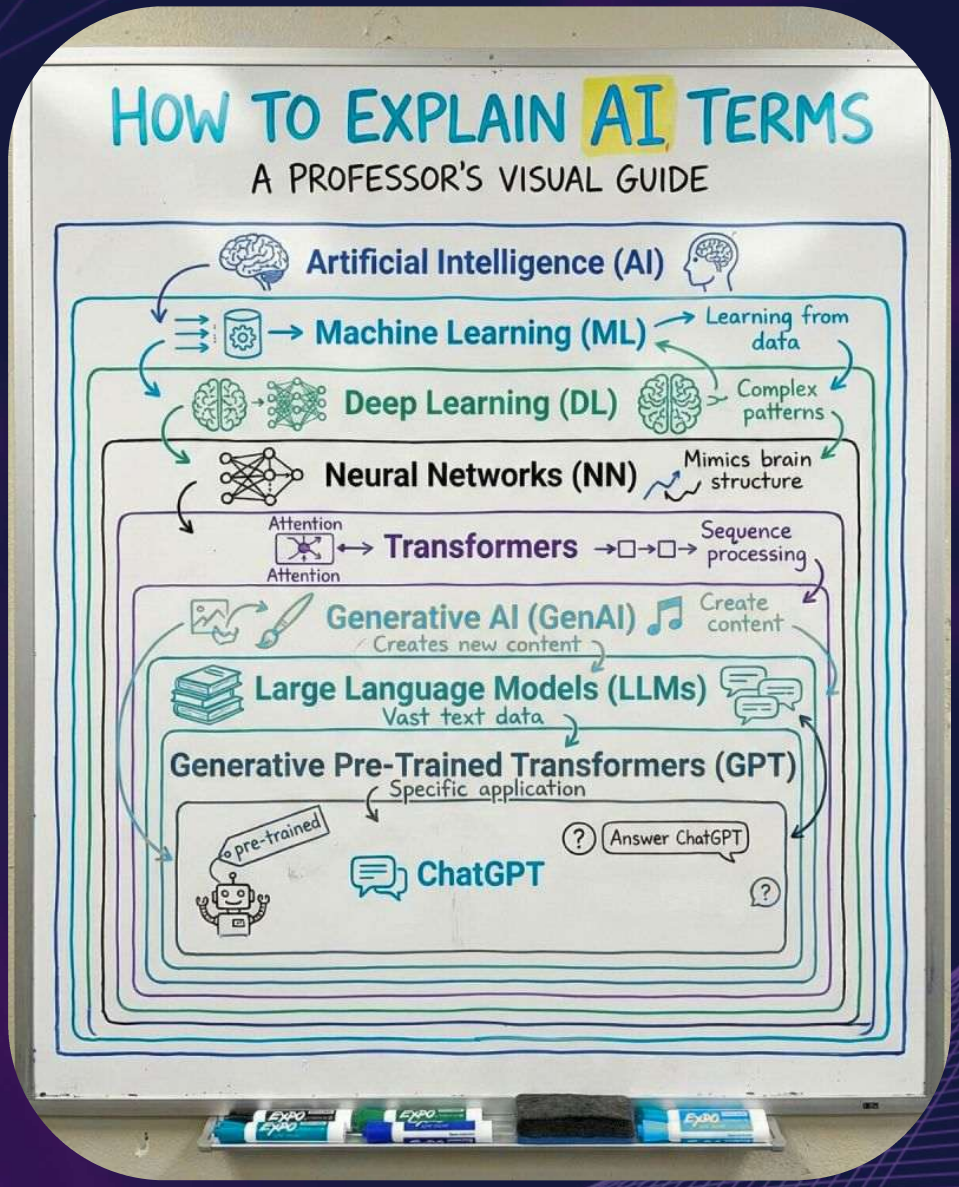
Who Am I?

- Lecturer in Computing Sciences
- Previously an RSE, and researcher for 18 years
- What follows is me ranting my personal opinions
- You will need a phone

What is AI?




Message ChatGPT
Search


HOW TO EXPLAIN AI TERMS
A PROFESSOR'S VISUAL GUIDE
Artificial Intelligence (AI)
Machine Learning (ML)
Learning from data
Deep Learning (DL)
Complex patterns
Neural Networks (NN)
Mimics brain structure
Attention
Transformers
Attention
Sequence processing
Generative AI (GenAI)
Create content
Creates new content
Large Language Models (LLMs)
Vast text data
Generative Pre-Trained Transformers (GPT)
Specific application
pre-trained
Answer ChatGPT
ChatGPT

Do Funders Know?

I recently applied to the MRC's Gap Fund:

Projects involving significant use of artificial intelligence (AI)

A significant use of AI in a Gap Fund project refers to the integration of artificial intelligence as a core enabling technology that fundamentally shapes the project's functionality, development, and value proposition. This means that AI is not merely an add-on feature but a major technique that drives the project's capabilities, automation, decision-making, or user experience.

Tell Me More About “AI”

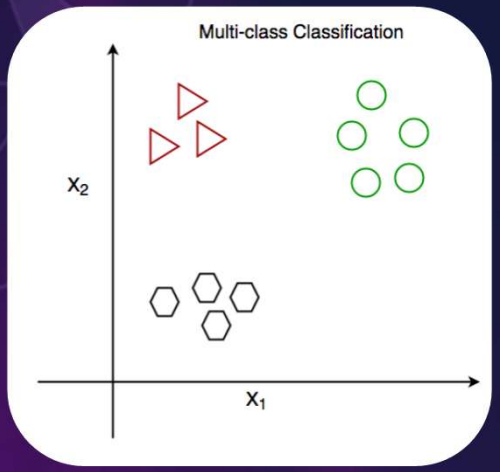
justify why the proposed methodology is suitable

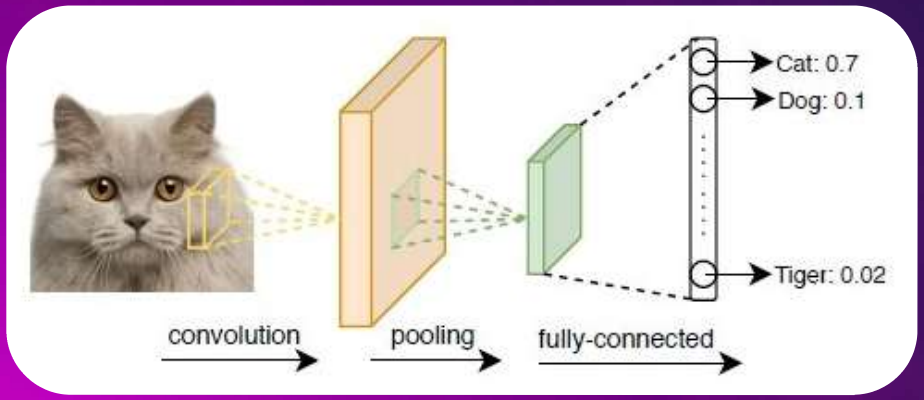
justify the AI and clinical expertise of the individuals involved in this application

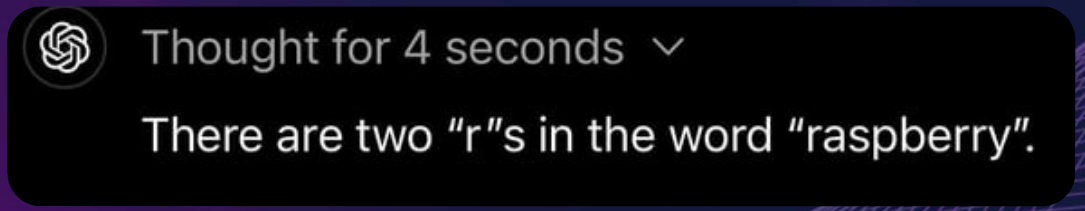
justify why the available data or your plans for data collection are sufficient

Solution?


11:48
3.27 kW
Cost now per hour £1.00
Now
10
OK


Multi-class Classification
x_2
x_1


Cat: 0.7
Dog: 0.1
Tiger: 0.02
convolution
pooling
fully-connected


Thought for 4 seconds
There are two “r”s in the word “raspberry”.

Meanwhile...

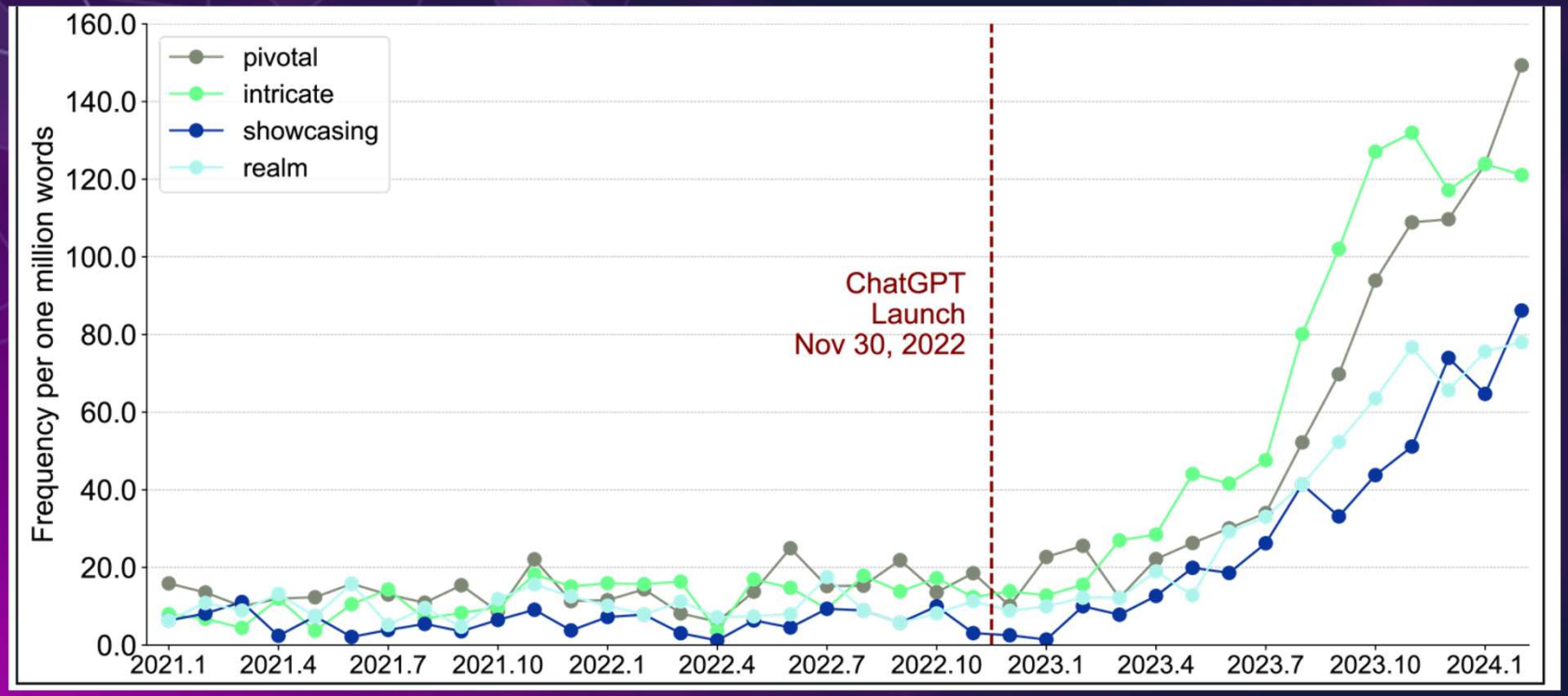
EVENT WITHDRAWN

Innovation Loans Round 26 - Applicant Briefing Webinar and Deep-dive Workshops

Following a review of timing against wider organisational commitments, 'Innovation Loans Round 26 - Applicant Briefing Webinar and Deep-dive Workshops' will not be taking place on 9th March. This decision has been taken to ensure continuity in planning and messaging across the wider innovation system. Attendees will receive communication from our events team. We apologise for any inconvenience caused and hope to revisit the event later this year.

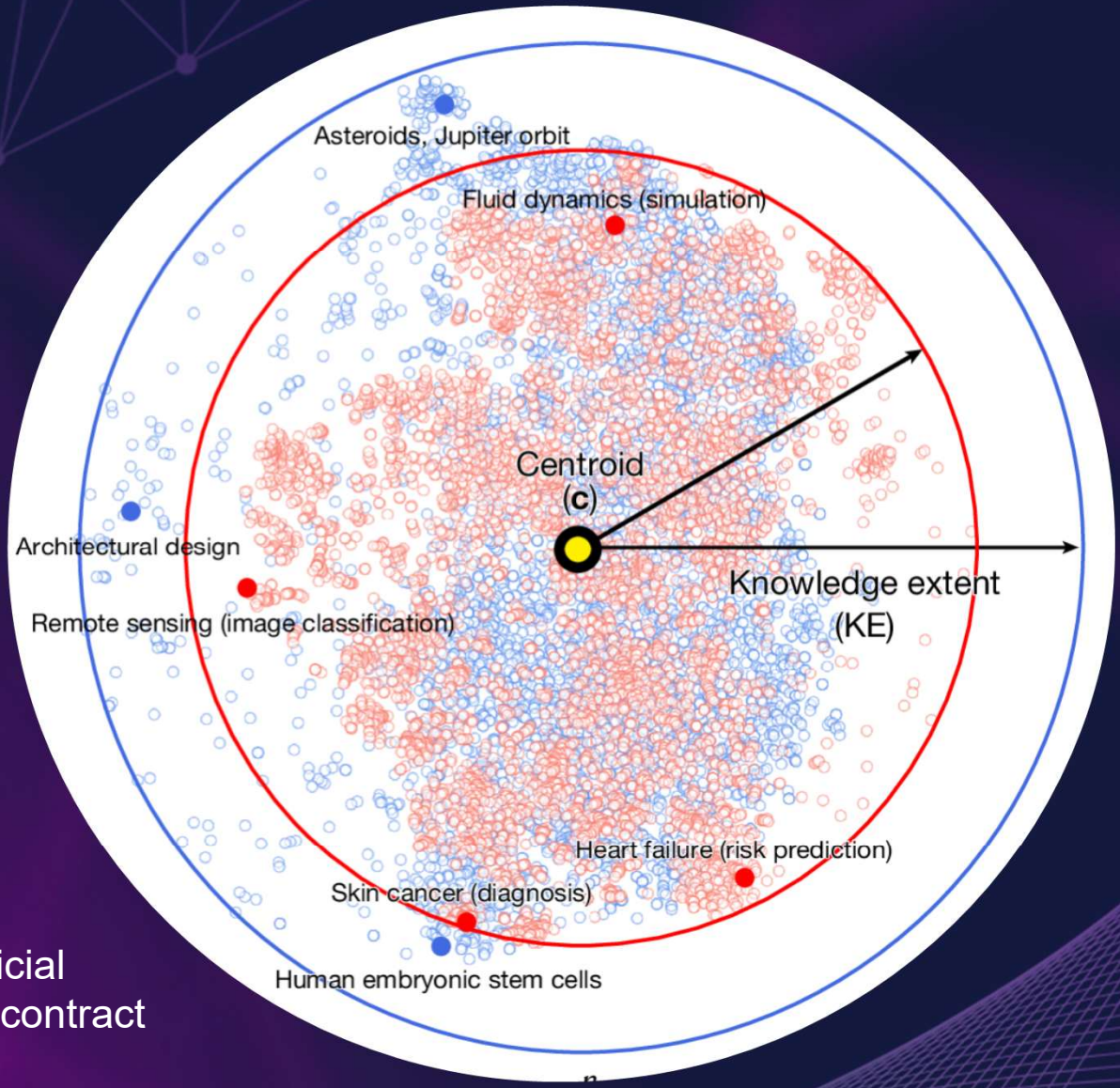
Some questions for you

Scientists Are Using LLMs



Liang, W., Zhang, Y., Wu, Z., Lepp, H., Ji, W., Zhao, X., ... & Zou, J. Y. (2024). Mapping the increasing use of LLMs in scientific papers. arXiv preprint arXiv:2404.01268.

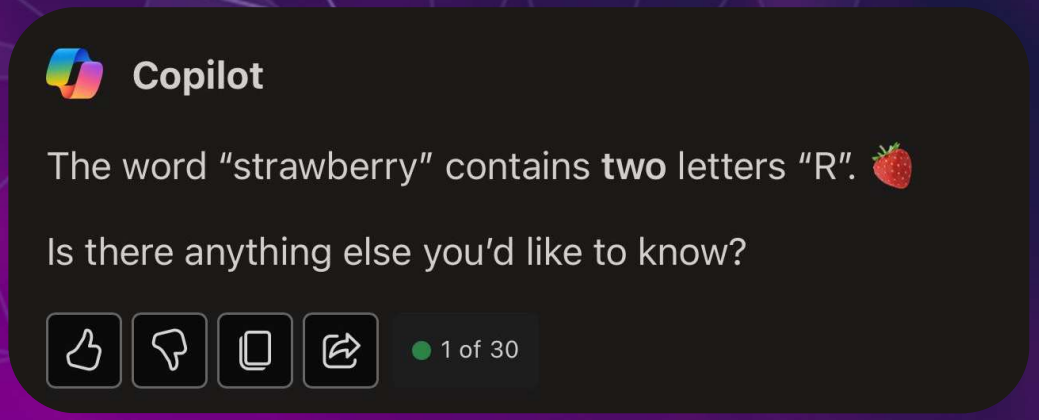
Good for metrics, bad for science



Hao, Q., Xu, F., Li, Y., & Evans, J. (2026). Artificial intelligence tools expand scientists' impact but contract science's focus. *Nature*, 1-7.

Another question for you

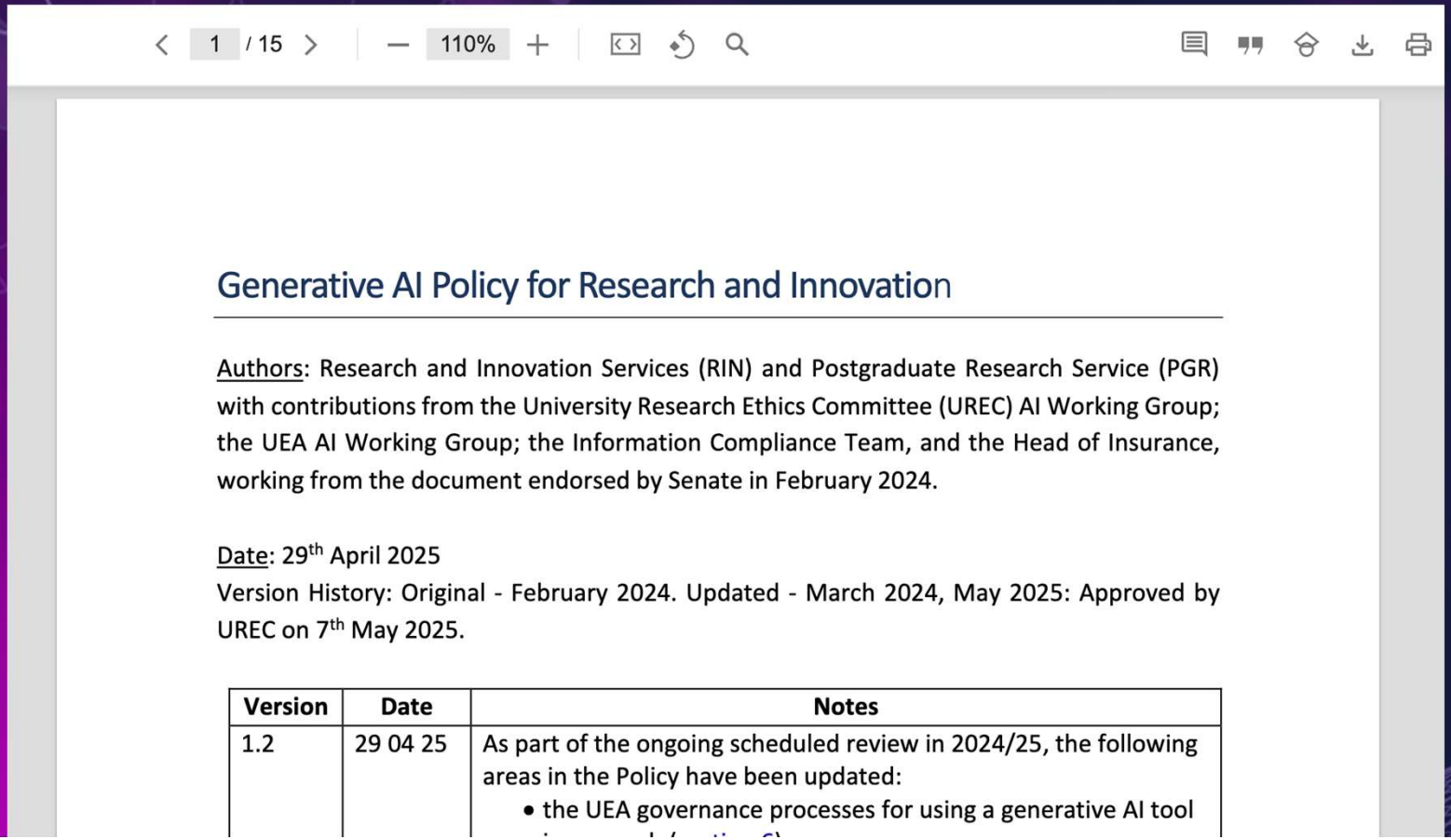
Accuracy of AI



AI assistants misrepresent news content 45% of the time – regardless of language or territory*

https://www.bbc.co.uk/mediacentre/2025/new-ebu-research-ai-assistants-news-content

Generative AI Policies



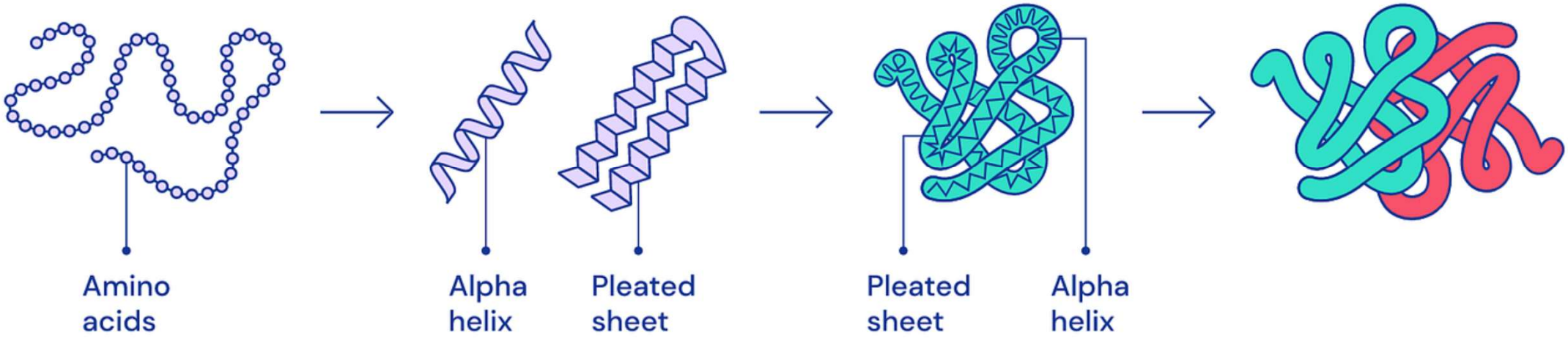
Generative AI Policy for Research and Innovation

Authors: Research and Innovation Services (RIN) and Postgraduate Research Service (PGR) with contributions from the University Research Ethics Committee (UREC) AI Working Group; the UEA AI Working Group; the Information Compliance Team, and the Head of Insurance, working from the document endorsed by Senate in February 2024.

Date: 29th April 2025
Version History: Original - February 2024. Updated - March 2024, May 2025: Approved by UREC on 7th May 2025.

Version	Date	Notes
1.2	29 04 25	As part of the ongoing scheduled review in 2024/25, the following areas in the Policy have been updated: • the UEA governance processes for using a generative AI tool

A Positive Note



A Final Thought

Thank you for listening!

University of East Anglia

applied sciences
an Open Access Journal by MDPI

IMPACT FACTOR 2.5
CITESCORE 5.5

Guest Editor :

Dr. Jacob Laurence Newman
University of East Anglia, United Kingdom

Special Issue: Machine Learning and Artificial Intelligence Technologies for Data Science

Submission Deadline: 30 September 2026

This Special Issue focuses on practical applications of Machine Learning and Artificial Intelligence within the field of Data Science. As data availability continues to grow, data-driven Machine Learning and Artificial Intelligence methods continue to advance in terms of applicability and efficacy. They are the foundation of a wide range of processes, such as data exploration, feature engineering, computational modelling, prediction and classification.

This issue will highlight recent progress in these core areas, with an emphasis on contributions demonstrating practical value rather than purely theoretical developments. We welcome research showcasing novel algorithms, frameworks and tools that address real-world data challenges across multiple domains such as healthcare and marine technologies.

We welcome work involving **time-series analysis**, **clustering**, **pattern recognition** and **large-scale data mining**. Submissions incorporating **deep learning**, **explainable Artificial Intelligence** and **generative models** are also encouraged. By drawing together applied methodologies from diverse areas, this Special Issue aims to provide a comprehensive view of the current research landscape in data science.

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