

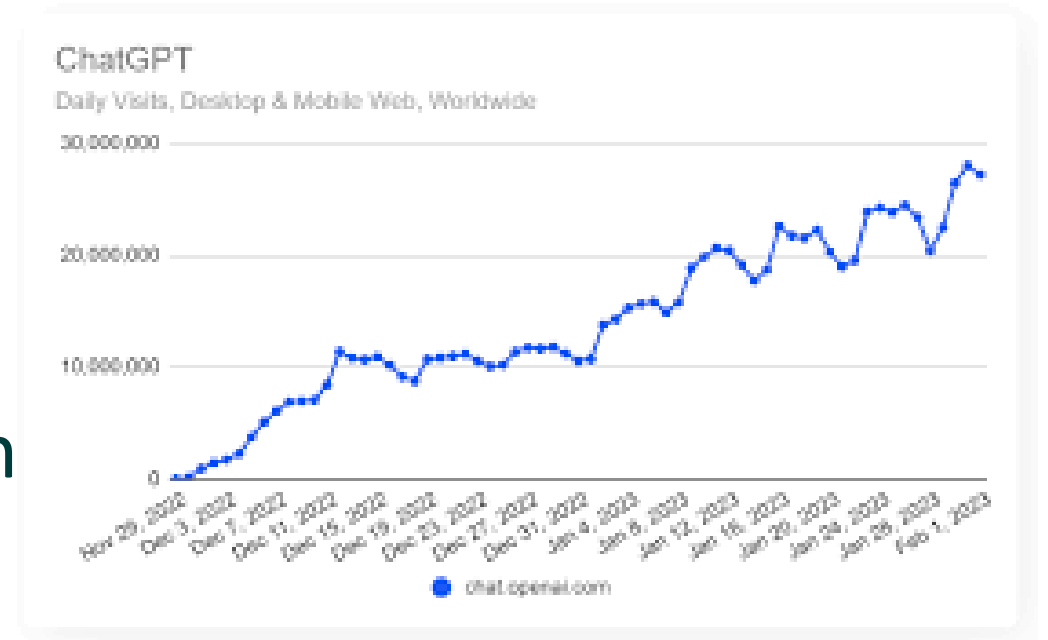
A deep space galaxy field with a prominent starburst in the center. The background is dark with numerous galaxies of various colors (white, yellow, orange, red, blue) and shapes (spiral, elliptical, irregular). A bright starburst with a blue and white core and long, thin, radiating arms is centered in the upper half of the image. Another smaller starburst is visible in the lower right quadrant.

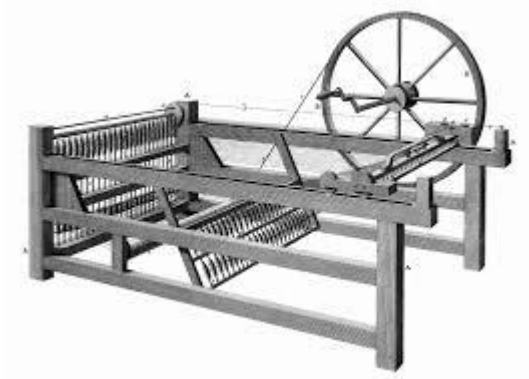
# Working with Gen AI and your tutor

Will Beckwith-Chandler  
Kevin Walsh

# Introduction

- AI, specifically LLMs, has become a significant part of our lives
- Impact on scientific research, including supervision of research students
- Ethical and accountability considerations





## Evolution of Research Projects

- Traditional approach: extensive reading, data collection, thesis production



- Revolutionized by technology: word processing, graphing, tabulating

- Recent developments in AI, automation of instrumentation and processes

# Impact on Supervision of Research Projects



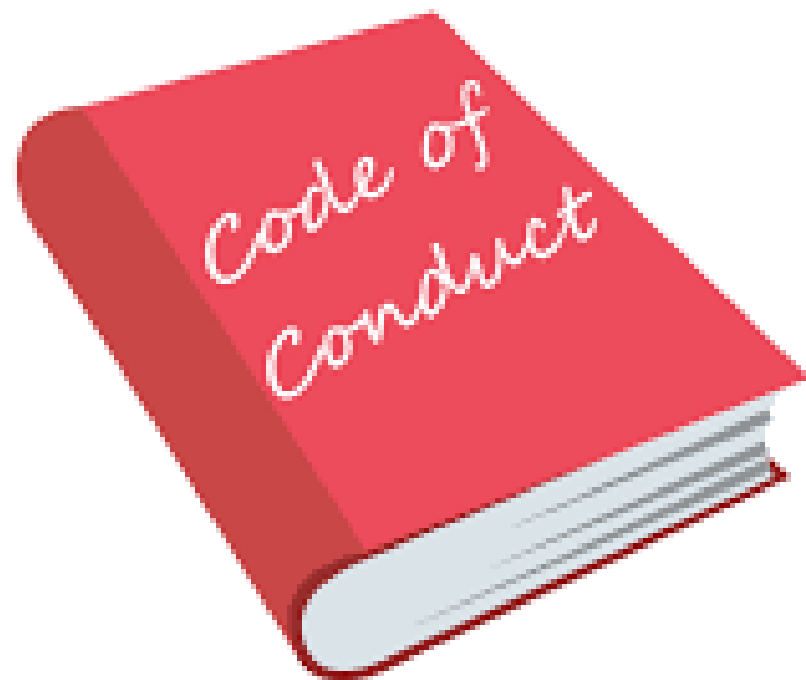
- Considerations: staff CPD, culture of mistrust, of students, age dependence

# Impact on Supervision of Research Projects

- Need for a formal and uniform approach to AI in HE research projects
- Potential benefits and drawbacks of using LLMs in research projects

## Framework for Supervision

- Nuanced approach: understanding benefits and drawbacks
- Importance of face-to-face communication alongside AI usage
- Opportunities for deeper discussions and additional students



## Implementation of AI and LLMs

- Reduction of admin time through workshops and clear guidelines
- Ensuring technology does not undermine trust and confidence
- Clear structure for AI usage while encouraging curiosity and preventing over-reliance



## Some Conclusions

- AI can be extremely useful but is not a magic wand
- Need for a structured framework for AI usage in research supervision
- Balancing efficiency and effectiveness with trust and curiosity

## Looking at the intervention of AI in the practice of the research student – a discussion

