AI Rx – Essential AI for Clinicians

Learning Objectives

- Gain a comprehensive understanding of fundamental AI concepts applicable to clinical practice.
- Critically assess existing AI tools for diagnostics, research, and administrative purposes.
- Employ prompt engineering techniques and AI solutions to enhance operational efficiency.
- Recognise ethical implications while distinguishing genuine advancements from exaggerated claims.
- Develop practical strategies for incorporating AI into both individual and departmental workflows, ultimately reducing workloads and improving patient outcomes to foster safer, more intelligent, and compassionate care.

Programme Outline

Topics and timings for the day

09:00 – 10:00 | Part 1:

Foundations of Artificial Intelligence

- Introduction to Artificial Intelligence, Machine Learning, Deep Learning, and GPT models
- Understanding explainability, bias, and ethical considerations
- Critical appraisal of AI claims: identifying hype and "snake oil"

10:00 – 10:10 | Break

10:10 – 11:40 | Part 2:

AI in Action

Live Demonstrations & Real-World Use Cases

AI for Education

- Stanford AI education tools
- Google NotebookLM
- Glasp AI
- Anki Card AI AI for Research & Evidence Synthesis
- Perplexity AI

- Practical use of BestBETs and rapid evidence review

AI in Diagnostics

ECG interpretation · Ultrasound applications · Radiology · Dermatology

AI for Administration & Clinical Documentation

- Heidi
- Glass.ai

11:40 – 12:30 | Lunch and Brainstorming

12:30 – 13:30 | Part 3:

Tools for Efficiency & Productivity

Prompt Engineering with ChatGPT

- Structured prompting techniques
- Safe and effective clinical and non-clinical use

Productivity Tools & Bonus Demonstrations – Dr. Abid Nisar

- XTiles
- Additional digital tools to enhance efficiency

13:30 – 13:40 | Break and Brainstorming

13:40 – 15:00 | Part 4:

Build Your Own App – Vibe Coding (Hands-On Session)

- AI-assisted coding tailored for clinicians
- Rapid prototyping without prior coding experience
- Transforming clinical challenges into functional digital solutions

15:00 – 15:30 | Part 5:

Final Reflections & Big Questions

Key Discussion Topics:

- Distinguishing AI hype from clinical reality
- Evaluating the tangible impact of AI on daily clinical and emergency medicine practice

- Benefits for clinicians
- Assessing limitations, risks, and challenges associated with AI in healthcare
- Defining authentic AI applications

Faculty Panel Discussion

Interactivity

Methods for enhancing programme engagement include:

- Live polling conducted before and after key sessions to assess learning outcomes
- Case-based discussions focusing on the application of AI tools in real emergency department scenarios
- Panel Q&A sessions designed to address participant concerns and explore practical solutions
- Interactive prompt-engineering workshop enabling delegates to develop and test prompts
- Implementation of Mentimeter for audience interaction and feedback
- Live demonstrations, allowing participants to create their own applications during the session