



ETHICAL CONCERNS

Lecturer: Mark Gillan

LESSON FOCUS

- How generative AI produces content
- Ethical concerns raised by its use
- Views from governments, educators, media, and the public
- Questions for discussion and debate

HOW GENERATIVE AI PRODUCES CONTENT

- Generative AI systems are trained on extremely large collections of data.
- They learn patterns in language, images, or sound.
- When given a prompt, the system predicts the most likely next word, pixel, or sound.
- The output appears creative, but it is based on probability, not understanding.
- This process raises ethical concerns about control, accuracy, and responsibility.



CONCERN 1: ACCURACY AND MISINFORMATION

- Generative AI can produce content that sounds confident but is incorrect.
- This is often described as “hallucination”.
- AI does not know when it is wrong.
- Governments and educators worry about misinformation spreading quickly.

Discussion question:

- Who is responsible if AI produces false information?

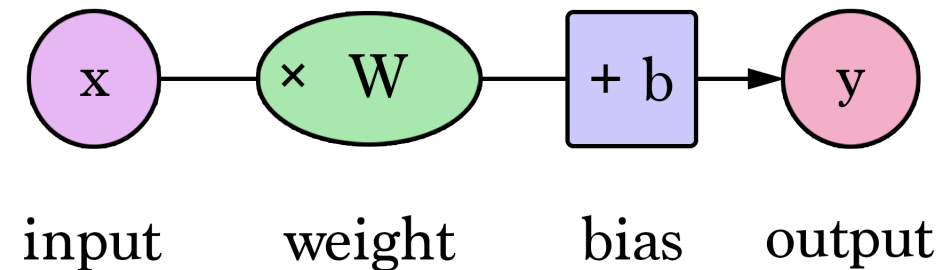


CONCERN 2: BIAS IN GENERATED CONTENT

- AI systems learn from human-created data.
- If the data contains bias, the AI may repeat or amplify it.
- Bias may relate to gender, race, disability, or social class.
- Professional bodies warn this can reinforce existing inequalities.

Discussion question:

- Can biased training data ever produce fair outputs?



CONCERN 3: COPYRIGHT AND OWNERSHIP

- Generative AI is trained on large amounts of online content.
- Artists, writers, and journalists argue their work is used without permission.
- Media organisations question who owns AI-generated content.
- Governments are debating changes to copyright law.

Discussion question:

- Should creators be paid if their work trains AI systems?



CONCERN 4: ACADEMIC INTEGRITY AND EDUCATION

- Generative AI can produce essays, reports, and answers instantly.
- Colleges and universities worry about plagiarism and cheating.
- Educators question how learning and assessment should change.
- Some institutions now redesign assessments rather than banning AI.

Discussion question:

- Is using AI for coursework always unethical?



CONCERN 5: DEEPPFAKES AND DECEPTION

- Generative AI can create realistic images, audio, and video.
- Deepfakes can be used to impersonate real people.
- Politicians and governments warn of risks to democracy.
- The public fears loss of trust in media and evidence.

Discussion question:

- How can society tell what is real anymore?



CONCERN 6: IMPACT ON JOBS AND CREATIVITY

- Writers, designers, and musicians worry about job losses.
- AI can produce content faster and cheaper than humans.
- Trade unions argue this shifts power towards employers.
- Others argue AI can support creativity rather than replace it.

Discussion question:

- Is AI a tool for creativity or a threat to creative work?



POWER, CONTROL, AND BIG TECHNOLOGY

- Most generative AI systems are owned by large technology companies.
- Governments worry about concentration of power.
- Decisions about safety and ethics may be made privately.
- Calls are growing for regulation and transparency.

Discussion question:

- Who should control how generative AI is developed?



GENERATIVE AI PERSPECTIVE

- I do not understand truth, morality, or intent.
- I generate responses based on patterns in data.
- I can reflect human values, but I cannot judge them.
- My outputs depend heavily on how I am prompted and used.
- This raises questions about trust and over-reliance.



ETHICAL AREAS COVERED

- Accuracy and misinformation (“hallucinations”)
- Bias and inequality
- Copyright, ownership, and creators’ rights
- Academic integrity and assessment
- Deepfakes, deception, and trust
- Employment and creative industries
- Power and control by large technology companies
- Regulation versus innovation

SUMMARY AND REFLECTION

- Generative AI creates content using learned patterns.
- Ethical concerns include accuracy, bias, copyright, education, and trust.
- Different groups have different views and priorities.
- Society must decide how generative AI should be used.

Final discussion:

- Should generative AI be limited, regulated, or widely encouraged?

