### Ethics and the Generative Al Boom

#### Introduction

Generative artificial intelligence (AI) has developed rapidly since 2022. Tools such as ChatGPT, Google Gemini and Microsoft Copilot are now part of daily life. They are used in workplaces and education, often with little reflection on the risks. This speed of adoption has created concerns about how AI should be governed and what role professionals should play.

Although AI has existed for decades, the recent surge feels different. Governments struggle to set rules. Companies release updates faster than regulators can respond. Educators are under pressure to keep assessments credible, and employers must protect workplace integrity. These pressures highlight the gap between broad ethical principles and daily practice.

This reflection considers that gap. Correa et al. (2023) show how ethical guidelines vary across nations and institutions, and how agreement is rare. Deckard (2023) focuses on the skills professionals need to work responsibly, including communication and collaboration. My experience in education adds a further lens, since JCQ rules and malpractice policies already try to control Al use in assessment.

# Insights from Literature

Correa et al. (2023) describe an "Al ethics boom." Their study reviews 200 guidelines from governments, companies and civil society. Principles such as transparency, fairness, accountability, privacy and safety appear repeatedly, but definitions vary. Privacy in Europe is tied to data protection law, while in China it may be linked to state surveillance. Correa and colleagues conclude there is overlap but no real consensus. Most guidelines are voluntary, leaving enforcement weak.

Deckard (2023) takes a different approach. He highlights the professional skills needed for AI ethics. Computing professionals must combine technical knowledge with philosophy, law and social science. They need to stay informed about AI developments, understand social and political contexts, and communicate complex ideas to varied audiences. He also stresses collaboration across disciplines and involvement in policy debates.

Together, these sources show a tension. Correa highlights the lack of agreement on standards, while Deckard points to professional responsibility in the absence of consensus. Both underline that principles alone are not enough.

### Governance in Practice

Turning principles into practice is not simple. Correa et al. (2023) note that most guidelines are voluntary. Governments, companies and institutions often stop short of binding regulation. This leaves professionals working with incomplete rules, where decisions depend on context and judgement.

Education illustrates this difficulty. JCQ guidance sets strict rules. Students must submit their own work, and unacknowledged AI use counts as malpractice (JCQ, 2023). My college policy follows the same line (College 2024). These rules align with accountability and fairness yet applying them is complex. Detection tools are unreliable, students misunderstand acknowledgement, and teachers spend time checking work or holding short interviews to confirm authenticity.

Staff use of Al also raises risks. Teachers are encouraged to use Al to prepare lessons, create resources or mark work. If unchecked, this can produce generic materials, inaccurate feedback or inconsistent grading. These outcomes affect fairness and trust as much as student malpractice. Governance should address both sides of responsibility.

Similar challenges appear outside education. In industry, professionals face pressure to deliver fast results with AI tools, but accountability for errors is unclear. Governments propose regulation, but enforcement lags technological change. In all cases, the gap between principle and practice creates uncertainty.

Another concern is the effect of AI on computing education itself. I have seen fewer students choosing computer science and IT, perhaps believing that AI can do the work for them. This risks future applications being built by people who rely on AI outputs without understanding how they were generated or how to maintain them. Coding has already shifted from hours of writing followed by short debugging to quicker generation and longer debugging sessions. Engineers still need strong coding backgrounds to build reliable systems. Without this, the profession risks losing essential expertise.

## Recommendations for Action

Governments should move beyond voluntary guidelines and adopt binding rules. Correa et al. (2023) show that current frameworks are weak without enforcement. The European Union's AI Act illustrates how principles can become law. International coordination is also needed, since inconsistent rules create loopholes.

For computing professionals, the focus must be on capacity to act responsibly in uncertain contexts. Deckard (2023) highlights the need for continuous learning, both technical and ethical. Professional bodies like the BCS and ACM could expand training, ensuring their codes cover generative AI and bias.

At practice level, institutions can take steps to make principles workable. In education, this means assessments that reduce reliance on AI, such as oral presentations, staged drafts or in class tasks. In industry, similar measures apply, audit trails, human review of AI outputs and transparent reporting to clients or the public.

# Impacts: Legal and Professional

# Legal

Generative AI raises questions about liability, intellectual property and malpractice. As Correa et al. (2023) note, most guidelines are non-binding. Without clearer rules, professionals risk being accountable for actions taken by systems they do not control. In education, JCQ guidance treats unacknowledged AI use as malpractice, with penalties from loss of marks to disqualification. In industry, copyright disputes show similar problems.

## Professional

For computing professionals, the issues are responsibility, competence and integrity. Deckard (2023) stresses interdisciplinary skills and communication. For teachers it involves checking their own practice, avoiding over reliance on AI for lesson planning or marking, and ensuring outputs are accurate and fair. Ethical use requires transparency with learners and accountability for final decisions. Professional codes, such as those from the BCS and ACM, already demand integrity and fairness. The challenge is to apply them consistently when AI changes the boundaries of work.

#### Conclusion

Generative AI has expanded quickly and raised challenges that cut across law, society and professional life. Correa et al. (2023) show how principles such as fairness, accountability and transparency appear in many guidelines yet are rarely enforced. Deckard (2023) reminds us that professionals cannot wait for perfect consensus and must build the skills needed to act responsibly.

My experience in education reflects this gap between principle and practice. JCQ guidance and college malpractice policies give clear rules, but they leave grey areas that staff and students must navigate. This is one example of a wider issue: ethical principles lose force when professionals lack the tools to apply them fairly.

The way forward requires three things. First, regulation must evolve into enforceable standards. Second, institutions must create processes that make accountability and transparency possible. Third, professionals must commit to continuous learning and responsibility. By combining these approaches, computing professionals can uphold trust and fairness while adapting to the opportunities and risks of generative AI.

# References

Correa, N.K., Galvão, C., Santos, J.W., Del Pino, C., Pinto, E.P., Barbosa, C., Massmann, D., Mambrini, R., Galvão, L., Terem, E. and de Oliveira, N. (2023) 'Worldwide AI ethics: A review of 200 guidelines and recommendations for AI governance', *Patterns*, 4(10), p.100857. doi: <a href="https://doi.org/10.1016/j.patter.2023.100857">https://doi.org/10.1016/j.patter.2023.100857</a>

Deckard, R. (2023) 'What are ethics in AI?', *BCS – The Chartered Institute for IT*, 3 April. Available at: <a href="https://www.bcs.org/articles-opinion-and-research/what-are-ethics-in-ai/">https://www.bcs.org/articles-opinion-and-research/what-are-ethics-in-ai/</a> (Accessed: 28 August 2025).

Joint Council for Qualifications (2023) Al use in assessments: Protecting the integrity of qualifications. Coventry: JCQ.

College (2024) NEA and malpractice policy. Internal document.