# Lab 9 - Data Governance & Ethics

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## Introduction:

Ethics and data governance are central to modern computing practices. Over the decades, professional bodies have developed codes of conduct to ensure that practitioners act responsibly. With the rise of artificial intelligence (AI), questions have emerged as to whether traditional IT ethics sufficiently address the new challenges posed by AI technologies. This report examines five codes of conduct—from the ACM, British Computer Society, Canadian Information Processing Society, European Association for AI, and the Voluntary Code on Advanced Generative AI Systems—to identify common principles and distinct areas of focus, and to assess if a unique code for AI is justified.

## Code of Conduct Summaries:

* **ACM Code of Ethics**  
  The ACM code emphasizes professional integrity, public good, honesty, and fairness. It outlines responsibilities toward society, fellow professionals, and the discipline itself, urging members to avoid harm, ensure transparency, and commit to continuous improvement in knowledge and skills.
* **British Computer Society Code**  
  This code focuses on professionalism and accountability. It underscores the need for integrity, respect for privacy, and commitment to the public interest. The BCS code encourages computing professionals to use their expertise for societal benefit and to maintain high ethical standards in decision-making.
* **Canadian Information Processing Society Code**  
  The CIPS code is centered on principles of trust, competence, and professional responsibility. It stresses confidentiality, integrity in professional work, and a commitment to serving the public interest while upholding standards of fairness and honesty in the field of information processing.
* **European Association for AI Code**  
  Specifically aimed at AI professionals, this code addresses the unique challenges of developing and deploying AI systems. It focuses on transparency, accountability, and fairness in AI applications. The guidelines emphasize the need for explainability in AI decisions and advocate for mitigating biases that might lead to unintended harm.
* **Voluntary Code of Conduct on the “Responsible Development and Management of Advanced Generative AI Systems”**  
  This emerging code is tailored to the fast-paced development of generative AI technologies. It highlights risk management, accountability, transparency, and ethical risk assessment. The guidelines are designed to mitigate potential harms such as misinformation, unintended bias, and privacy infringements while promoting responsible innovation in generative AI.

## Similarities:

Despite their differing scopes, all five codes share foundational ethical principles:

* **Commitment to the Public Good:** Each code mandates that professionals prioritize societal well-being over individual or corporate gains.
* **Integrity and Honesty:** Practitioners are urged to be transparent, honest, and accountable in their work.
* **Professional Competence and Continuous Improvement:** All codes stress the importance of maintaining high professional standards and staying current with evolving technology and practices.
* **Respect for Privacy and Data Protection:** Safeguarding confidential information and respecting users’ privacy is a recurring theme across these guidelines.

## Differences

While the core values are common, key differences emerge in focus and application:

* **Scope and Specialization:**
  + Traditional codes (ACM, BCS, CIPS) provide broad guidelines applicable to all IT professionals.
  + The European Association for AI and the Voluntary Code for generative AI are specialized, addressing issues specific to AI—such as algorithmic bias, explainability, and the ethical implications of automated decision-making.
* **Emphasis on Risk Management:**
  + The generative AI code, in particular, emphasizes proactive risk management to address fast-evolving technological challenges, while traditional codes offer more general guidance on risk and harm avoidance.
* **Regulatory vs. Voluntary Nature:**
  + Some codes are developed by well-established professional organizations with long histories (e.g., ACM and BCS), whereas the Voluntary Code for generative AI is more recent and reflects an industry-led effort to self-regulate in a rapidly changing environment.

## Artificial Intelligence: Is a Unique Code Justified?

Artificial intelligence brings new challenges that extend beyond conventional IT practices. Issues such as algorithmic bias, opacity of decision-making processes, and the potential for large-scale societal disruption necessitate additional guidelines. Although the foundational ethical principles are shared, AI’s unique technical and ethical challenges—like ensuring fairness in autonomous systems, explaining AI-driven decisions, and managing the impact of generative AI on information ecosystems—support the need for a dedicated code. Such specialized guidelines can more directly address the nuances of AI development and deployment, complementing traditional IT codes by offering targeted best practices and risk mitigation strategies.

## Conclusion

In summary, AI is an Emerging Field with a lot of Unexpected Challenges. While traditional IT codes of conduct provide a solid ethical foundation, the unique challenges posed by AI technologies warrant specialized guidelines. The examination of various codes reveals both common principles and distinct areas of focus, underscoring the need for a comprehensive approach to ethics in the age of AI. As technology continues to evolve, so too must our ethical frameworks, ensuring that they remain relevant and effective in guiding responsible practice.

There will be a lot of changes in the future, and we need to be ready for them.