ACM Code of Ethics
https://www.acm.org/code-of-ethics

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1. GENERAL ETHICAL PRINCIPLES

A computing professional should...

1.1 Contribute to society and to human well-being, acknowledging that all people are stakeholders in computing.

1.2 Avoid harm.

1.3 Be honest and trustworthy.

1.4 Be fair and take action not to discriminate.

1.5 Respect the work required to produce new ideas, inventions, creative works, and computing artifacts.

1.6 Respect privacy.

1.7 Honor confidentiality.

2. PROFESSIONAL RESPONSIBILITIES

A computing professional should...

2.1 Strive to achieve high quality in both the processes and products of professional work

2.2 Maintain high standards of professional competence, conduct, and ethical practice.

2.3 Know and respect existing rules pertaining to professional work.

2.4 Accept and provide appropriate professional review.

2.5 Give comprehensive and thorough evaluations of computer systems and their impacts, including analysis of possible risks.

2.6 Perform work only in areas of competence.

2.7 Foster public awareness and understanding of computing, related technologies, and their consequences.

2.8 Access computing and communication resources only when authorized or when compelled by the public good.

2.9 Design and implement systems that are robustly and usably secure.

3. PROFESSIONAL LEADERSHIP PRINCIPLES

A computing professional should...

3.1 Ensure that the public good is the central concern during all professional computing work.

3.2 Articulate, encourage acceptance of, and evaluate fulfillment of social responsibilities by members of the organization or group.

3.3 Manage personnel and resources to enhance the quality of working life.

3.4 Articulate, apply, and support policies and processes that reflect the principles of the Code.

3.5 Create opportunities for members of the organization or group to grow as professionals.

3.6 Use care when modifying or retiring systems.

3.7 Recognize and take special care of systems that become integrated into the infrastructure of society.

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4. COMPLIANCE WITH THE CODE

A computing professional should...

4.1 Uphold, promote, and respect the principles of the Code.

4.2 Treat violations of the Code as inconsistent with membership in the ACM.

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Case Study Approach

- Consider: Who are the relevant actors and stakeholders? What were the anticipated and/or observable effects of the actions or decisions for those stakeholders? What additional details would provide a greater understanding of the situational context?

- Analyze: What stakeholder rights (legal, natural, or social) were impacted and to what extent? What technical facts are most relevant to the actors' decision? What principles of the Code were most relevant? What personal, institutional, or legal values should be considered?

- Review: What responsibilities, authority, practices, or policies shaped the actors' choices? What potential actions could have changed the outcomes?

- Evaluate: How might the decision in this case be used as a foundation for similar future cases? What actions (or lack of action) supported or violated the Code? Are the actions taken in this case justified, particularly when considering the rights of and impact on all stakeholders?

Case Study - Linking Public Data Sets (part A)

Quinn is a member of a medical research team studying the role of genetic factors in psychological disorders, particularly focusing on how different variants influence social behavior. To facilitate this work, Quinn built a tool that linked three anonymized data sets: an anonymized set of genetic test results accessible only by medical researchers, a publicly available anonymized database of clinical diagnoses, and a custom database of public social networking posts. To preserve anonymity, the tool replaced all personally identifiable information in the social networking posts with quasi-identifiers. Quinn's team was granted approval for a study by their ethics review board (ERB), on the grounds that all data was anonymous and/or public, and all users had opted in to the data collection.

Case Study - Linking Public Data Sets (part B)

While testing the tool, Quinn discovered a bug that incorrectly linked some records of multiple individuals as a single person. Given that the data sets were all anonymized, the team had accepted that such erroneous matches were likely to occur. The bug increased the expected number of such matches, but only slightly; as such, the bug was classified as low priority. Quinn raised concerns that there may be other such bugs and suggested that the source code be released under an open source license to facilitate peer review of both the tool and the overall research.