

INFT3800 - S1/2021
Workshop/Tutorial – Week 2
Code of Professional Conducts & Ethics
School of Electrical Engineering and Computing
University of Newcastle

In this workshop, you will look into different example of professional ethics or code of conducts from various organizations;

- ACM <https://www.acm.org/code-of-ethics>
- IEEE <https://www.ieee.org/about/corporate/governance/p7-8.html>
- ACS https://www.acs.org.au/content/dam/acs/acs-documents/ACS%20Code-of-Professional-Conduct_v2.1.pdf

Once you have read these code of ethics, discuss with your friends the following case studies:

1. You are contracted by a Web design consultancy company to interview their staff to ascertain their current knowledge. The aim of the study is to inform the company about the type of training courses they need to implement. The aim is therefore to highlight areas of overall weakness as opposed to individual shortcomings. Despite this, the type of data you collect will be able to identify individual's weaknesses. Informed consent clearly states that comments made to you by interviewees are to remain private. Following the study, a senior Vice President of the company approaches you, asking you "who did well in the study?" What do you say?
2. Jean, a statistical database programmer, is trying to write a large statistical program needed by her company. Programmers in this company are encouraged to write about their work and to publish their algorithms in professional journals. After months of tedious programming, Jean has found herself stuck on several parts of the program. Her manager, not recognising the complexity of the problem, wants the job completed within the next few days. Not knowing how to solve the problems, Jean remembers that a co-worker had given her source listings from his current work and from an early version of a commercial software package developed at another company. On studying these programs, she sees two areas of code which could be directly incorporated into her own program. She uses segments of code from both her co-worker and the commercial software, but does not tell anyone or mention it in the documentation. She completes the project and turns it in a day ahead of time. Do you think Jean has violated any code of conduct? Please explain your answer.
3. Nirmal is the IT manager in a government department with more than 500 staff members and six branches across Australia. His department has decided to acquire an enterprise resource planning (ERP) system. An RFT for the procurement of the software was advertised in a number of Australian newspapers. Two local companies responded to the advertisement and sent their offers to the department. When Nirmal opened the envelopes and examined the offers he found that company A's offer is slightly better than company B's offer. To his surprise, company B's offer was made by his best friend Devraj, who is the general manager of company B. Company A's software appeared to be easier to use and easier to modify compared to company B's software. Although the initial cost of company B' software appeared to be less than that of company's A, the former may require some 'tools-consultants' to modify it and some 'business-consultants' to assist in running it, which might eventually raise the total cost. To complicate

matters more, Nirmal received a phone call from Devraj, who urged him to favour his offer, as he is quite desperate to get this deal. He also reminded him that the 'tools and business consultants' who might be needed in the project will be recruited from his home country which means more jobs for his countrymen and in turn more money sent home. Nirmal is indeed in a difficult position. What points in the ACS Code of Professional Conduct that Nirmal should look into before making his decision?

4. Read the case studies at <https://onlineethics.org/cases/resources-engineering-and-science-ethics/algorithm-discriminates> and answer the questions that are asked at the end of the case.

Sources:

- Habash, R. (2019). *Professional Practice in Engineering and Computing: Preparing for Future Careers*. CRC Press.
- ACS Code of Professional Conduct Case Studies
- Online Ethics Centre (OEC) for Engineering and Science