

School of Computing Technologies

COSC2615 Advanced Professional Development

Assignment 1 Milestone 1: Written research report



Assessment Type: REPORT

WORD LIMIT: 3000 words (+/- 10%)
excluding references and bibliography



Due Date: 1800H 6pm AEDT
Wednesday 3rd April 2024



Weighting: 20%

Overview:

You are asked to write a report on the ethical dilemma surrounding **ONE** of the following scenarios:

Scenario 1

Los Angeles Police Force - Data Driven Policing

For years, scholars and activists have critiqued the algorithms used in data-driven policing, arguing that they merely techwash bias by making sloppy investigative work seem objective. Leading the charge in Los Angeles is the Stop LAPD Spying Coalition. Through public records requests, the group's activists have obtained documents on police use of data analytics, and in 2018 they successfully pushed the city's Office of the Inspector General to audit the department's use of technology.

For example the LAPD used an automated license plate reader mounted outside an emergency room to build out networks of victims' associates. A sergeant explained that family or friends would often drop off an injured person and then speed away. With the automated license plate reader, he said, police could use plate numbers to determine who else was connected to the victim, even if there was no other evidence linking them to a crime.

Source "The Intercept" published 20th January 2021

Scenario 2

Amazon's biased AI doesn't like women.

Amazon worked on building a "A.I." tool to help with hiring, but the plans backfired when the company discovered the system discriminated against women. Citing five sources, Reuters said Amazon set up an engineering team in Edinburgh, Scotland, in 2014 to find a way to automate its recruitment. The company created 500 computer models to trawl through past candidates' résumés and pick up on about 50,000 key terms. The system would crawl the web to recommend candidates.

"They literally wanted it to be an engine where I'm going to give you 100 résumés, it will spit out the top five, and we'll hire those," one source told Reuters. A year later, however, the engineers reportedly noticed something troubling about their engine — it didn't like women. This was apparently because the AI combed through predominantly male résumés submitted to Amazon over a 10-year period to accrue data about whom to hire. Consequently, the AI concluded that men were preferable. It reportedly downgraded résumés containing the words "women's" and filtered out candidates who had attended two women-only colleges.

Source: Business Insider published 10th October 2018

Instructions:

You are expected to select one of the questions above, define the underlying ethical dilemma, research these ethical issues, identify the stakeholders involved and recommend at least two possible solutions with considerations of their affect on the Australian IT industry. You are expected to carry your research work about the identified topic and produce a formal report. This assignment requires you to engage in issues about Ethics, Cyberethics and Critical Thinking that are covered in this course.

Assessment criteria

This assessment will measure your ability to:

- Introduce and explain the dilemma as an ethical issue that arises in the IT industry (5%)
- Conceptualise, summarise and synthesise how the major ethical theories interact with concepts of business and marketing organisation and practices (5%)
- Explain and apply methods available to resolve the impacts of ethical issues relevant to the IT industry (5%)
- Apply research and referencing guidelines clearly and consistently (3%)
- Communicate meaning clearly and consistently through the use of sentence structure and grammar (2%).

Course learning outcomes

This assessment is relevant to the following course learning outcomes:

- CLO1 Recognise the need for computing ethics in the Information Technology (IT) industry and the complexities involved in computer ethical issues, and use the available legal tools to safeguard a developer's interests when developing / publishing / marketing software

- CLO2 Discuss, explain and apply concepts of business organisation, business practices, system acquisition, marketing principles and the major ethical theories
- CLO3 Discuss, explain and apply ethical, social media, political, economic, legal, and marketing issues relevant to the IT industry; and methods available to resolve these issues including the legalities involved in starting a computer (software) company
- CLO4 Discuss, analyse and evaluate computing practice case studies, prepare SWOT analyses, and create detailed marketing plans using the proper language of the field in both written and oral presentations
- CLO6 Demonstrate self-directed learning and more specifically the role of life-long learning for the longevity and progression of your career in IT.

Assessment details

Research subject

You are asked to write a report on one of the questions above either LAPD Police or Amazon AI In this report you will need to include the following important aspects:

- Define and explain **the key issue** - avoid injecting your personal bias when describing the issue
- Detail who is likely being impacted by these concerns (a list of stakeholders invested in the issue must be included).
- What is the key ethical dilemma in the problem, and are there other ethical issues as well?
- What are some possible ramifications of the ethical issues?
- Explain your proposed solutions (at least two) and discuss the expected associated outcomes.

Discovering a relevant and good topic is part of the assignment. It needs to be done by considering the multiple topics available to you. Choose one according to your interests.

Structure your report

When writing a report, the intention is to present the findings made after carrying out research about a particular subject. It is to present investigation results in an area of interest as well as to demonstrate the ability to analyse information. In order to address the identified problems or improve the current state of affairs, reports often make recommendations for actions or changes. It is highly recommended that you visit [RMIT University's guidelines on report writing website](#) before starting to write the report.

The report is expected to be highly structured, using the following titled and numbered sections:

1. **Introduction:** Give an overview of the topic and give the reader an idea of what the paper contains and how it is structured. It is not intended to replicate the analysis, nor necessarily list out proposed solutions.
2. **Background Analysis:** Use the following framework to perform an analysis and write the results as coherent paragraph structured for a formal report.
 - a) List the known relevant facts

- b) Identify the stakeholders
- c) Discuss the duties and obligations of each of the stakeholders involved
- d) Identify ethical values and social impacts

Legal Recourse Available in Australia: If someone suffers adversely as a result of the use of technology within your chosen topic, what legal recourse is available in Australia? Consider questions such as:

1. Who is legally responsible for the negative consequences and why?
2. Who is obligated to ensure no harm can come to those who use this technology, or are involved in this situation?
3. If there is no specific law to deal with the issue, what could be done?

Proposed Solutions: Think of at least two, and preferably more, possible solutions that may help in solving the underlying issue. Explain your answer, e.g., why do you think these solutions might work? Explain the expected consequences.

Case Study: Write a case study outlining a situation where the aggravated parties in your scenario have suffered from the underlying ethical issues. Be creative here; come up with names, situations and events that happen within the scenario. Apply your previously proposed solutions and discuss where they may assist victims.

Conclusion: The conclusion should give a quick overview of the topics and findings as well as the suggested solutions. It may also contain suggestions for future analysis.

Bibliography

List all references used in your arguments.

Referencing is necessary for any claim in the report that is not considered to be [common knowledge](#).

A modified version of RMIT Harvard referencing style must be used (refer to the Referencing section).

Appendix

A URL to a publicly available Google Drive shared folder (refer to the Referencing section)

Word count of your essay, excluding the Bibliography and Complimentary sections.

For more information about what is expected in each of these sections, refer to the [RMIT's Report Writing Process](#). You will see that the template shared in the given link consist of additional sections not listed above. You are not expected to provide the additional sections.

References

A minimum of 10 references must be cited in the article. It is not sufficient to simply add a reference to the Bibliography section, that is, each reference **must be cited** at least once in the body of your essay to be considered as a valid reference.

A minimum of 4 references must strictly be from peer-reviewed journal/conference articles. The rest of references can be books, journal/conference articles, reports/standards by reputable publishers/organisations. Other types of references **are not acceptable** (e.g. random news websites/blogs, Wikipedia articles). The peer-

reviewed articles must be written in bold font in the Bibliography section so that they can be easily distinguished from the other sources. As well, a copy of the peer-reviewed article or page must be taken and highlight the section which includes the referenced text. This must be shared with your Tutor in a Google Drive folder which is linked in the Appendix mentioned above in section 8

Referencing guidelines

The Bibliography section must use a modified version of [RMIT Harvard](#) referencing style. That is, you must also add page numbers to the citations, which is not part of RMIT Harvard style. The [Easy Cite](#) tool by RMIT Library can help you to learn how RMIT Harvard referencing is used. Make sure all the citations you have contains the relevant page number.

Submission format

Use Microsoft Word or similar. The assessment will be submitted in Canvas as a file upload.

Academic integrity and plagiarism

Academic integrity is about honest presentation of your academic work. It means acknowledging the work of others while developing your own insights, knowledge and ideas.

You should take extreme care that you have:

- Acknowledged words, data, diagrams, models, frameworks and/or ideas of others you have quoted (i.e. directly copied), summarized, paraphrased, discussed or mentioned in your assessment through the appropriate referencing methods
- Provided a reference list of the publication details so your reader can locate the source if necessary. This includes material taken from Internet sites

If you do not acknowledge the sources of your material, you may be accused of plagiarism because you have passed off the work and ideas of another person without appropriate referencing, as if they were your own.

RMIT University treats plagiarism as a very serious offence constituting misconduct. Plagiarism covers a variety of inappropriate behaviors, including:

- Failure to properly document a source
- Copyright material from the internet or databases
- Collusion between students

For further information on our policies and procedures, please refer to the University website.

Assessment declaration

When you submit work electronically, you agree to the [assessment declaration](#)

Assessment Rubric

Criteria	Ratings						Pts
	HD	D	C	P	N	DNS	
Identify and explain the ethical dilemma in one of the questions above	<p>The ethical issue identified is relevant and applicable to the IT industry.</p> <p>The dilemma is explained in detail, including all relevant stakeholders and impacts</p>	<p>The ethical issue identified s relevant and applicable to the IT industry.</p> <p>The dilemma is explained with some detail, including most relevant stakeholders and impacts</p>	<p>The ethical issue identified is mostly relevant and applicable to the IT industry but some terms are not defined.</p> <p>The dilemma is explained with some detail, including some relevant stakeholders and impacts</p>	<p>The ethical issue identified has some relevance and applicability to the IT industry.</p> <p>The dilemma is explained with few details, including some relevant stakeholders and impacts</p>	<p>The ethical issue identified acks relevance and applicability to the IT industry.</p> <p>The dilemma is explained but without detail, including some relevant stakeholders and impacts</p>	No report submitted	
	5 pts	4 pts	3 pts	2.5 pts	2 – 1 pts	0 pts	5pts
Conceptualise and synthesise how ethical theories interact with concepts of business and marketing of the Metaverse	<p>The major ethical theories are comprehensively articulated, with clear and detailed synthesis of their interaction with concepts of business and marketing practices</p>	<p>The major ethical theories are clearly articulated, with synthesis of their interaction with concepts of business and marketing practices</p>	<p>The major ethical theories are mostly articulated, with general synthesis of their interaction with concepts of business and marketing practices</p>	<p>The major ethical theories are partly articulated, with synthesis of their interaction with concepts of business and marketing practices</p>	<p>The major ethical theories are poorly articulated, with little or no synthesis of their interaction with concepts of business and marketing practices</p>	No report submitted	
	5 pts	4 pts	3 pts	2.5 pts	2 – 1 pts	0 pts	5pts

Explain and apply methods to resolve ethical impacts on the IT industry

Application of methods to resolve ethical issues and impacts was realistic and relevant.	Application of methods to resolve ethical issues and impacts was mainly realistic and relevant.	Application of methods to resolve ethical issues and impacts was mostly realistic and relevant but with some gaps.	Application of methods to resolve ethical issues and impacts was relevant in part.	Application of methods to resolve ethical issues and impacts was absent or incomplete.	No report submitted
Explanation of methods was detailed, comprehensive and convincing	Explanation of methods lacked some detail or convincing argument	Explanation of methods lacked detail	Explanation of methods was general with some detail lacking	Explanation of methods was incomplete	
5 pts	4 pts	3 pts	2.5 pts	1 pts	0 pts

Research and referencing

Integrates research and ideas from relevant and appropriate sources.	Integrates research from relevant and appropriate sources	Generally integrates relevant theory from a number of mostly appropriate sources	Integrates relevant theory from a number of mostly appropriate sources but with occasional irrelevant information	Fails to use relevant theory / or number of sources indicates lack of research	
Consistently clear, well-integrated evidence using accurate paraphrasing and summary.	Clear, evidence using accurate paraphrasing and summary	Paraphrases adequately to avoid plagiarism	Generally paraphrases adequately to avoid plagiarism	Does not paraphrase correctly	No report submitted
Accurate references, appropriately positioned	Uses mostly accurate references, appropriately positioned	References generally accurately positioned	References generally accurately positioned	References positioned incorrectly or used inaccurately	
3 pts	2.5 pts	2 pts	1.5 pts	1 pts	0-0 pts

Writing and grammar

Consistently uses correct grammar (verb tenses, subject-verb agreement, pronouns)	Mostly uses correct grammar (verb tenses, subject-verb constructs, pronouns)	Communicates meaning through use of clear language.	Generally, uses correct grammar (verb tenses, subject-verb agreement, pronouns.)	Incorrect use of grammar (verb tenses, subject-verb agreement, pronouns)	No report submitted	
Consistent use of appropriate vocabulary and sentence structure enabling unambiguous grasp of the meaning	Mostly uses appropriate vocabulary and sentence structure enabling clear grasp of the meaning	Consistent use of appropriate vocabulary and sentence structure enabling unambiguous grasp of the meaning	Generally, uses appropriate vocabulary and sentence structure; some lapses causing lack of clarity	Vocabulary limited and frequently inappropriate; sentence structure often incorrect/does not convey meaning		
Correct punctuation and spelling	Correct punctuation and spelling	Correct punctuation and spelling	Adequate punctuation and spelling; some lapses	Inadequate punctuation and/or spelling		
Communicates meaning through use of clear and unambiguous language	Communicates meaning through use of clear and unambiguous language	Consistent use of correct grammar (verb tenses, subject-verb agreement, pronouns etc.)	Generally, communicates clearly; some instances of incorrect use of language	Language fails to communicate meaning clearly		
2 pts	2 pts	1.5 pts	1 pts	0.5 pts	0 pts	2pts
					Total:	20 pts