MSc Computer Science

RMPP_PCOM7E January 2025

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Title: e-Portfolio Submission – https://helenhelene.github.io/eportfolio/

Final Reflection

(Word count: 1046)

Introduction

This reflection analyses my experiences during the Research Methods and Professional Practice (RMPP) module (Appendix 1), following Gibbs' (1988) six-stage framework (Gibbs, 1988; The University of Edinburgh, 2024). I draw on the artefacts produced for the module, as documented in the List of Artefacts (Appendix 2), along with insights recorded in the Professional Skill Matrix (Appendix 3), to illustrate my academic and professional development.

Description

Throughout the RMPP module, I undertook a range of activities aimed at strengthening my academic writing, research methods, data analysis, and professional professionalism. I gained firsthand experience in inferential statistics by completing exercises in the Statistical Worksheet (Appendix 4). Alongside these methods-focused tasks, I composed a Literature Review examining the financial impact of ransomware. I then developed a Research Proposal intended to assist small and medium-sized enterprises (SMEs) in Hong Kong in mitigating data breach risks, aligning with global standards such as ISO while adhering to local statutory requirements.

In addition to participating in Collaborative Discussion 1 and 2 (Appendix 5), I completed Reflective Activities that addressed ethical considerations in the AI era (Appendix 6), as well as a Case Studies on Privacy (Appendix 7) and the Inappropriate Use of Surveys (Appendix 8). All these activities underscored the importance of ethical questions concerning codes of conduct and compliance. These discussions highlighted the need to stay up to date with the British Computer Society (BCS), the Association for Computing Machinery (ACM), and the General Data Protection Regulation (GDPR) in an era of rapid change. The module required me to compile the outcomes of these activities into an e-Portfolio (Appendix 9) and produce a Reflective piece. My SWOT Analysis (Appendix 10) enabled me to recognise strengths, such as my capacity for organization, and weaknesses including a reliance on point-form notes. The Action Plan (Appendix 11) supported my progress by guiding my efforts to address these limitations at each stage, and all essential competencies were recorded in the Matrix (Appendix 12).

Feelings

At the start of the module, I experienced both enthusiasm and apprehension. The idea of enhancing my research design and data analysis skills, whilst also developing stronger academic writing and project management abilities, seemed professionally beneficial. Nevertheless, the challenge of managing a significant workload alongside existing job commitments led to some concerns about time management. Over time, however, my confidence grew. By drawing on my organisational and time management skills, I was able to meet key deadlines effectively..

Examining ethical standards and codes of conduct, particularly relating to data protection practices, heightened my sense of purpose, given the clear alignment with practical professional contexts. After completing the Literature Review, Research Proposal and assembling the e-Portfolio, I felt both a sense of accomplishment and relief. Although some aspects of the tutor's feedback were demanding, the guidance was mostly encouraging, prompting me to refine my methods and skills.

Evaluation

Overall, the module provided a meaningful and worthwhile experience. Engaging with statistical exercises improved my competence in interpreting datasets and presenting them in a structured, visually coherent format. My Literature Review prompted a more thorough enquiry into ransomware issues, which not only enriched my academic insight but also expanded my awareness of the broader challenges faced by organisations. Perhaps most importantly, the module enhanced my appreciation of ethical considerations within the computing field.

Despite these successes, I did encounter some difficulties. The tutor's "umbrella" feedback on the Collaborative Discussions gave me the opportunity to reflect on my tendency to rely on outline or list-based formats. Although these approaches kept my work concise, they also limited the scope for demonstrating deeper integration of ideas. Balancing my professional duties with the research-focused expectations of the Research Proposal was another hurdle, and on occasion, I underestimated the challenges of linking theoretical arguments to real-world structures. Nonetheless, these issues ultimately

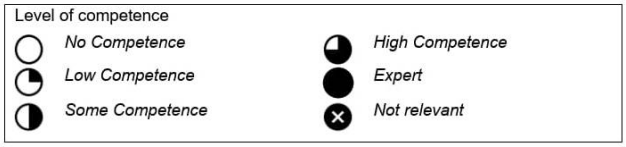
served as opportunities for reflection, enabling me to refine both my academic expression and my research approaches.

Analysis

Incorporating tutor feedback and undertaking work-driven tasks enhanced my understanding of how classroom learning directly applies to professional scenarios. The Skill Matrix (Figure 1) showed improvements in critical thinking, ethical decision-making, and other professional skills. My reading of scholarly articles revealed the importance of accurate referencing, thorough argumentation, and synthesising diverse perspectives, rather than relying on simplistic summaries.

I also noticed that my newly acquired theoretical insights informed my role as a Data Protection Officer (Appendix 13), particularly when forming persuasive arguments and drafting detailed policy documentation. The Action Plan reminded me of my developmental objectives, such as engaging more extensively with qualitative methodologies. I believe that exploring these methods further would enable me to examine real-world data breaches with even greater rigour. These observations support the view, espoused by Rolfe, Freshwater and Jasper (2001), that critical reflection can be a vital means of professional growth.

Skills Matrix (Rewo, n.d.)



	Skills									
	Time management	Commercial awareness and Ethical awareness	Critical thinking and analysis	Problem-solving and Decision-making	Initiative and Entrepre-neurial	Communicat-ion and Literacy skills	IT and Digital, Numeracy	Teamwork and Interpersonal	Critical reflection	Research
Before MSc Computer Science programme	◕	◔	◔	◑	◔	○	○	◔	○	○
Before RMPP module	●	◕	◑	◕	◕	◑	◑	●	●	◑
After RMPP module	●	●	●	●	●	◕	◑	●	●	◕

Figure 1: My Skill Matrix

For additional details, please refer to the Matrix in the e-Portfolio.

Conclusion

Reflecting on the varied tasks in this module indicates that I have made progress in both conceptual and practical domains. While I initially worried that time constraints and multiple commitments would be overwhelming, a well-structured study schedule allowed me to continue making headway. Engaging with ethical debates and working on the Research Proposal strengthened my awareness of how academic frameworks align with industry practices, and responding to feedback on my writing style encouraged me to move away from bullet points towards fully developed paragraphs. By reflecting on these successes and challenges, I have identified ways to further improve my performance in the future.

Action Plan

I intend to maintain this level of growth by continuously refining my academic writing and broadening my research knowledge. My first objective is to improve my writing skills through reading additional scholarly articles, thereby honing both the structure and content of my assignments. Incorporating multiple sources within each piece of work will also help me reach the level of complexity expected at postgraduate study.

In terms of managing competing priorities, I will continue to rely on structured schedules and apply recognised project management methodologies to my capstone project. I will break down goals and deliverables into realistic, manageable phases. Finally, I plan to maintain an active role in professional forums and organisations, which will help me remain informed about evolving regulations in data protection and equip me for future challenges and projects.

References

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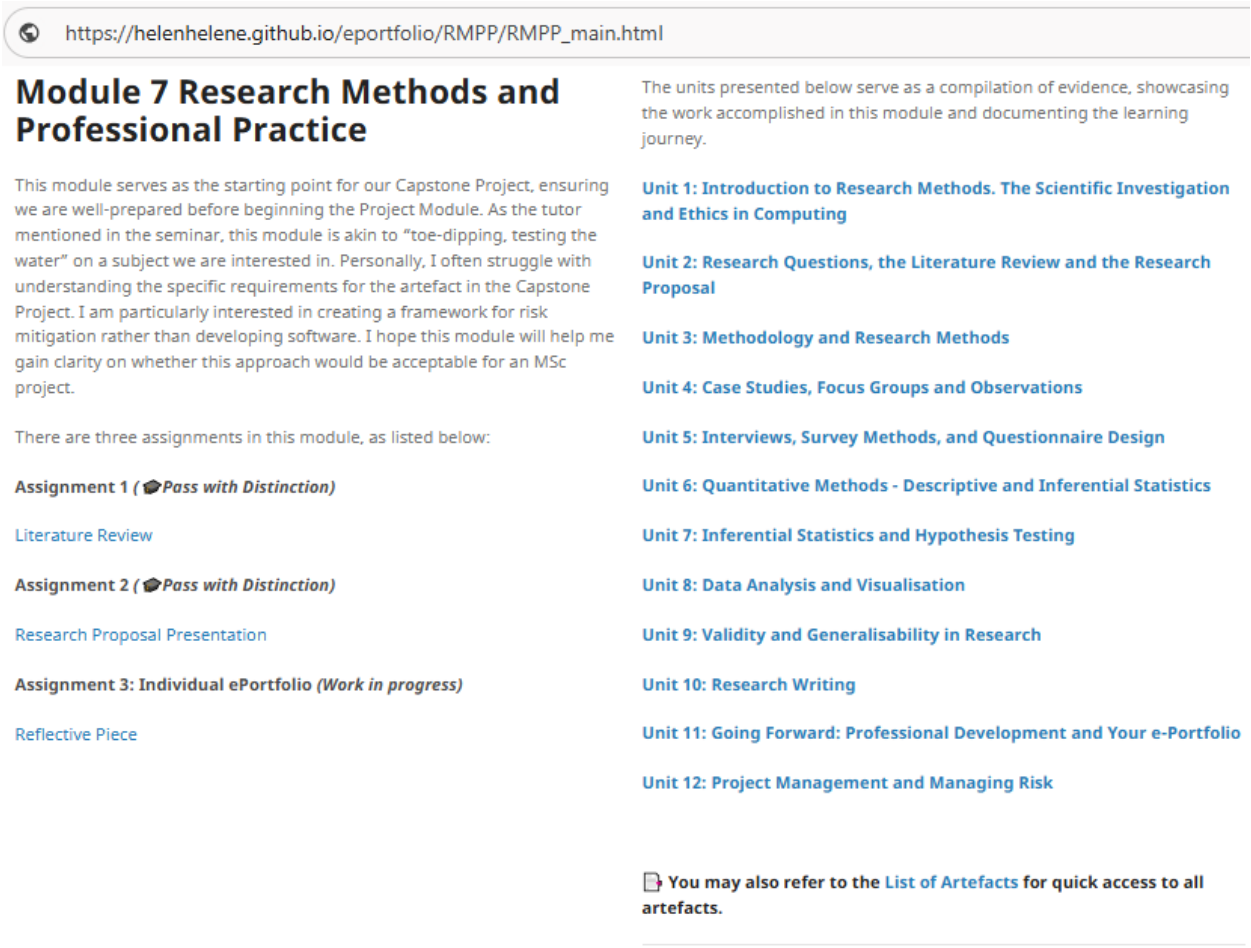
Rewo. (n.d.) What is a skills matrix. Available from: https://www.rewo.io/skills-matrix-for-manufacturing/ [Accessed 13 April 2025].

Rolfe, G., Freshwater, D. & Jasper, M. (2001) *Critical reflection in nursing and the helping professions: a user's guide.* Basingstoke: Palgrave Macmillan.

The University of Edinburgh. (2024) Gibbs' Reflective Cycle. Available from https://reflection.ed.ac.uk/reflectors-toolkit/reflecting-on-experience/gibbs-reflective-cycle [Accessed 12 April 2025].

Appendix 1: RMPP module



Appendix 2: List of Artefacts

https://helenhelene.github.io/eportfolio/RMPP/RMPP_ArtefactsSummary.html

List of Artefacts for Each Unit

Unit(s)	Component	Artefacts
1 - 3	Collaborative discussion 1	Codes of Ethics and Professional Conduct: Initial post, Peer Response 1, Peer Response 2, Peer Response 3, Summary post
1	Formative	Reasoning Quiz
1	Reflective Activity	Ethics in Computing
2	e-Portfolio Activity	Literature Review and Research Proposal Outlines
3	e-Portfolio Activity	Research Proposal Review
3	Seminar	Peer Review Activity
4	Seminar	Case Study on Privacy
4	Formative	Literature Review Outline Submission
5	Reflective Activity	Case Study: Inappropriate Use of Surveys
5	Wiki Activity	Questionnaires (Not attempted)
7 - 9	Collaborative discussion 2	Case Study on Accuracy of Information: Initial post, Peer Response 1, Peer Response 2, Peer Response 3, Summary post
7	Seminar	Inferential Statistics Workshop and Statistics Worksheet
8	e-Portfolio Activity	Research Proposal Outline
8	Formative	Inference Exercises
9	e-Portfolio Activity	Charts Example Worksheet
9	Formative	Practicing Business Visualisation with PowerBI
10	e-Portfolio Activity (Compulsory)	Statistical Worksheet Submissions
11	Seminar	e-Portfolio Preparation (The Matrix, Action Plan, SWOT)
12	Formative	Self Test Quiz

These artefacts collectively document the learning journey and practical application of concepts throughout the RMPP module.

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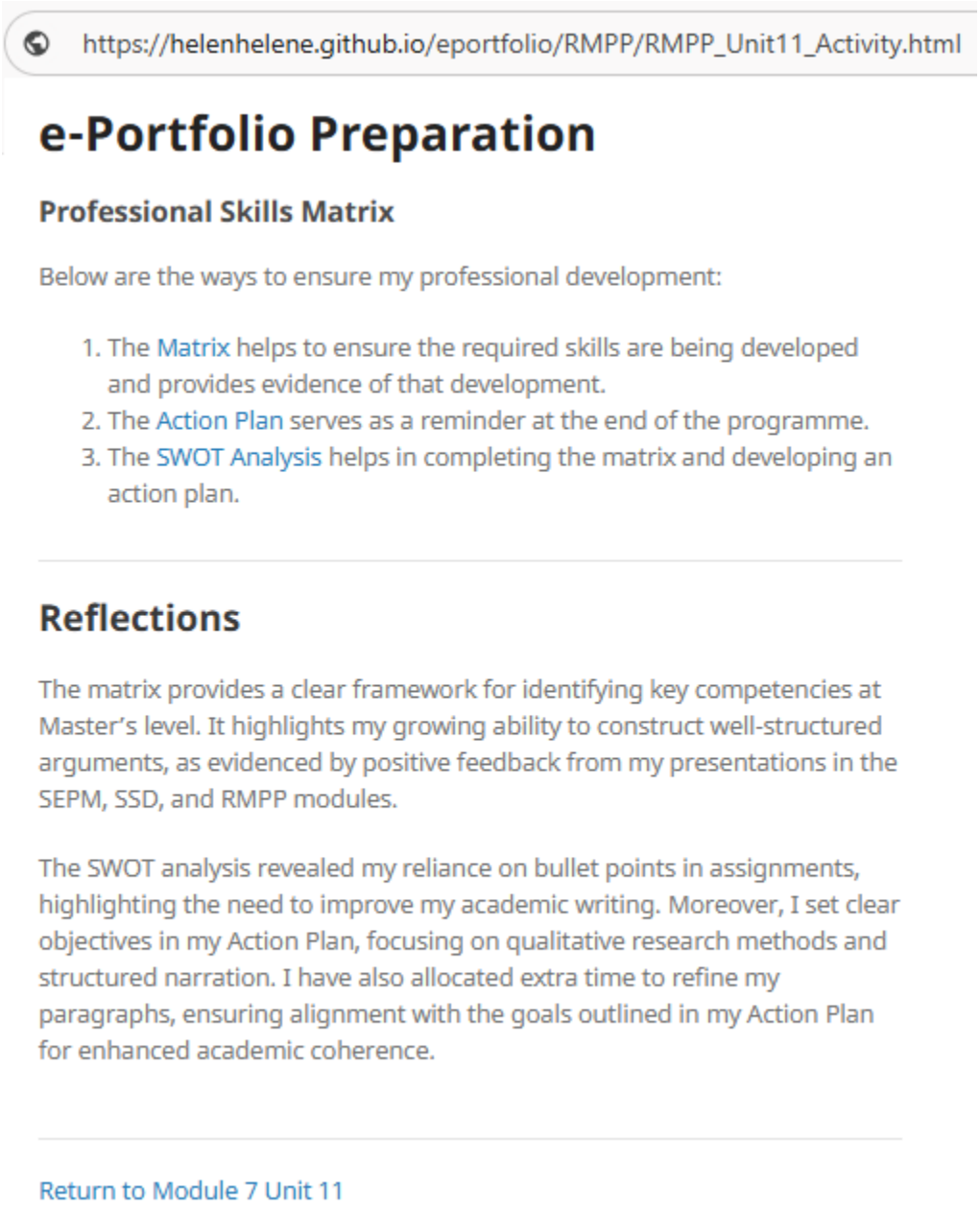
Appendix 3: Professional Skill Matrix



Appendix 4: Statistical Worksheet Submissions

https://helenhelene.github.io/eportfolio/RMPP/RMPP_Unit10_Activity.html

Statistical Worksheet Submissions

Requirement

Submit the analyses from Unit 8 and Unit 9 for formative feedback in Unit 10. Moreover, submit both analyses and the associated documentation as part of the final e-Portfolio submission in Unit 12.

Data Annexe and Datasets

7 Data Annexe
Brandprefs.xlsx
Designs.xlsx
Diets.xlsx
Heather.xlsx
Superplus.xlsx

Unit 8: Inference Worksheet and Exercises

Unit 9: Charts Worksheet and Exercise

Reflections

This submission covering Units 7 to 9, required us to progressively develop our skills. In Unit 7, we practised following instructions, applying these in Unit 8 exercises, and further exploring visualisation techniques in Unit 9, with all work to be submitted in Unit 10.

Beyond statistical skills, this series reinforced the importance of managing tasks efficiently and completing them promptly, even if they seem less important initially. Postponing tasks, especially formative or foundational ones, risks delaying the entire project or disrupting the plan. This process effectively trains us to stay on schedule, a crucial skill in project management.

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Appendix 5: Summary Post of Collaborative Discussion 1 and 2

https://helenhelene.github.io/eportfolio/RMPP/RMPP_Unit03_Summary.pdf

Collaborative Discussion 1 - Codes of Ethics and Professional Conduct-Summary post

Summary Post

◄ Initial post

Display replies in nested form

Settings

Summary Post

by Oi Lam Siu - Sunday, 9 February 2025, 10:57 AM

When reviewing the ACM case study on Abusive Workplace Behaviour (ACM, n.d.), it is generally agreed that team leader Max repeatedly violates key ethical standards (ACM, 2018; BCS, 2022), namely respect, honesty, and inclusive practices. His actions, including removing names from submissions, yelling in online forums, and denying credit, undermine both professional integrity and the psychological safety of his colleagues (Nielsen & Einarsen, 2012). Additionally, under UK law, such behaviour may amount to workplace harassment (Equality Act, 2010).

Central to the discussion is that leadership must cultivate a safe environment (Kapur, 2018), rather than excuse or ignore abusive conduct. Failing to act, as manager Jean does, breaches ethical obligations to support well-being. Ultimately, abusive supervision erodes morale, trust, and staff retention (Tepper, 2000). Adopting inclusive leadership, safeguarding workers' legal rights, and combatting hostile behaviour—both in-person and online—are vital (Avey et al., 2011).

Through ethical frameworks, legal standards, and proactive steps, employees' well-being is protected, and the profession's reputation is upheld. Organisation-level preventive strategies include confidential reporting mechanisms (Berry, 2004), robust leadership training (CIPD, 2019), and explicit misconduct policies. Embedding these within the organisational culture can discourage power imbalances and protect victims (Einarsen et al., 2011).

Furthermore, aligning with international guidelines such as ISO 45003:2021 on psychosocial risks (ISO, 2021) can help institutions formalise procedures to address stress and hostility. CIPD (2019) emphasises the importance of an ethics-focused culture, sustained by ongoing training. By adopting these measures, an organisation can uphold the public interest, maintain fairness, and preserve trust —principles at the heart of the ACM and BCS Codes (ACM, 2018; BCS, 2022).

References

ACM (2018). ACM Code of Ethics and Professional Conduct. Available from: https://www.acm.org/code-of-ethics [Accessed 1 February 2025].

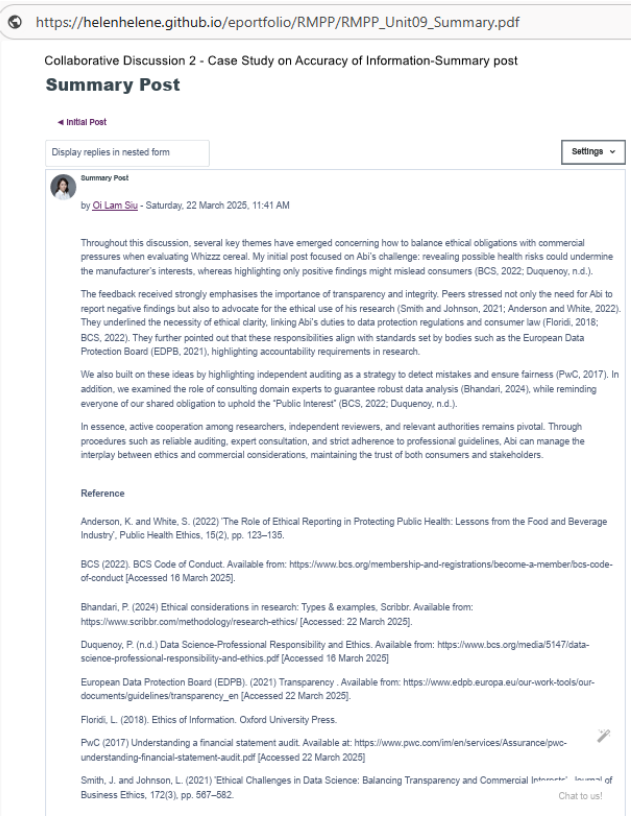
ACM (n.d.) Case Study: Case Study: Abusive Workplace Behavior. Available at: https://www.acm.org/code-of-ethics/case-studies/abusive-workplace-behavior [Accessed 1 February 2025].

Avey, J.B., Palanski, M.E. and Walumbwa, F.O., (2011). When leadership goes unnoticed: The moderating role of follower self-esteem on the relationship between ethical leadership and follower behavior. Journal of business ethics, 98, pp.573-582.

BCS (2022). BCS Code of Conduct. Available from: https://www.bcs.org/membership-and-registrations/become-a-member/bcs-code-of-conduct [Accessed 1 February 2025].

Berry, B. (2004). Organizational culture: A framework and strategies for facilitating employee whistleblowing. Employee Responsibilities and Rights Journal, 16, pp.1-11.

Einarsen, S., Hoel, H., Zapf, D., & Cooper, C. L. (2011). Bullying and Harassment in the Workplace: Developments in Theory,



https://helenhelene.github.io/eportfolio/RMPP/RMPP_Unit09_Summary.pdf

Collaborative Discussion 2 - Case Study on Accuracy of Information-Summary post

Summary Post

◄ Initial Post

Display replies in nested form

Settings

Summary Post

by Oi Lam Siu - Saturday, 22 March 2025, 11:41 AM

Throughout this discussion, several key themes have emerged concerning how to balance ethical obligations with commercial pressures when evaluating Whizzz cereal. My initial post focused on Abi's challenge: revealing possible health risks could undermine the manufacturer's interests, whereas highlighting only positive findings might mislead consumers (BCS, 2022; Duquenoy, n.d.).

The feedback received strongly emphasises the importance of transparency and integrity. Peers stressed not only the need for Abi to report negative findings but also to advocate for the ethical use of his research (Smith and Johnson, 2021; Anderson and White, 2022). They underlined the necessity of ethical clarity, linking Abi's duties to data protection regulations and consumer law (Floridi, 2018; BCS, 2022). They further pointed out that these responsibilities align with standards set by bodies such as the European Data Protection Board (EDPB, 2021), highlighting accountability requirements in research.

We also built on these ideas by highlighting independent auditing as a strategy to detect mistakes and ensure fairness (PwC, 2017). In addition, we examined the role of consulting domain experts to guarantee robust data analysis (Bhandari, 2024), while reminding everyone of our shared obligation to uphold the "Public Interest" (BCS, 2022; Duquenoy, n.d.).

In essence, active cooperation among researchers, independent reviewers, and relevant authorities remains pivotal. Through procedures such as reliable auditing, expert consultation, and strict adherence to professional guidelines, Abi can manage the interplay between ethics and commercial considerations, maintaining the trust of both consumers and stakeholders.

Reference

Anderson, K. and White, S. (2022) 'The Role of Ethical Reporting in Protecting Public Health: Lessons from the Food and Beverage Industry', Public Health Ethics, 15(2), pp. 123–135.

BCS (2022). BCS Code of Conduct. Available from: https://www.bcs.org/membership-and-registrations/become-a-member/bcs-code-of-conduct [Accessed 16 March 2025].

Bhandari, P. (2024) Ethical considerations in research: Types & examples, Scribbr. Available from: https://www.scribbr.com/methodology/research-ethics/ [Accessed: 22 March 2025].

Duquenoy, P. (n.d.) Data Science-Professional Responsibility and Ethics. Available from: https://www.bcs.org/media/5147/data-science-professional-responsibility-and-ethics.pdf [Accessed 16 March 2025]

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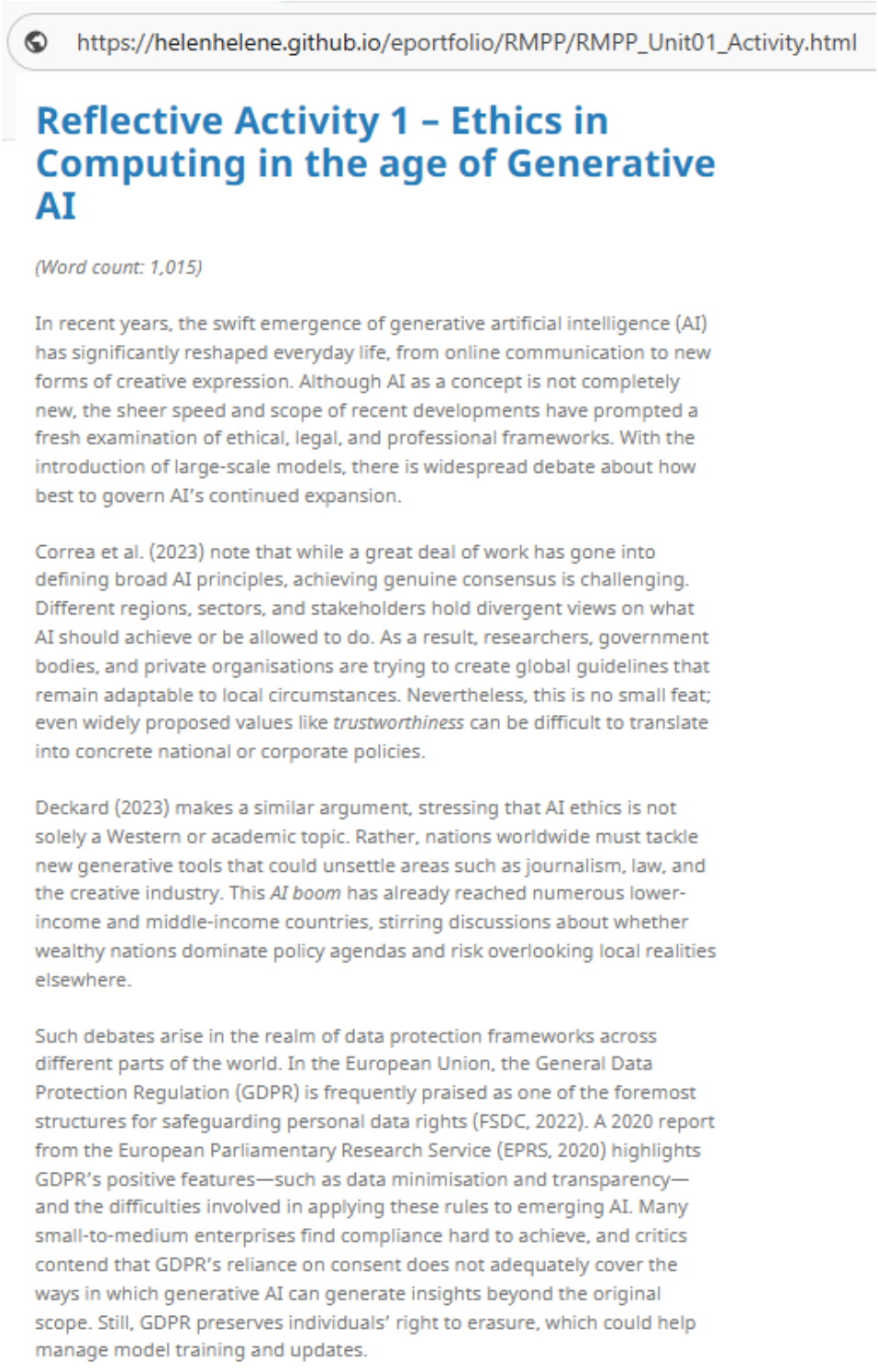
Floridi, L. (2018). Ethics of Information. Oxford University Press.

PwC (2017) Understanding a financial statement audit. Available at: https://www.pwc.com/im/en/services/Assurance/pwc-understanding-financial-statement-audit.pdf [Accessed 22 March 2025]

Smith, J. and Johnson, L. (2021) 'Ethical Challenges in Data Science: Balancing Transparency and Commercial Interests', Journal of Business Ethics, 172(3), pp. 567–582.

Chat to us!

Appendix 6: Ethics in Computing in the age of Generative AI



Appendix 7: Case Study on Privacy

https://helenhelene.github.io/eportfolio/RMPP/RMPP_Unit04_Seminar.html

Case Study on Privacy

Requirement

Please read the case below and answer the questions. You need to determine the ethical issues involved with this case.

Overview of the Case

Ricardo works as a computer records clerk in a local government's records department. He has access to property tax files containing both numerical data and personal information such as names and addresses. Beth, a researcher, has been permitted to examine only the numerical data but later discovers that she requires names and addresses of certain property owners to validate her study and seek their consent for further research. She requests Ricardo to provide these personal details.

Ethical Issues in Deciding Which Option to Pursue

Applying GDPR principles, personal information should be processed lawfully and fairly (Art. 5 GDPR, 1a). Additionally, GDPR emphasises the principle of "purpose limitation" (Art. 5 GDPR, 1b), meaning data collected for one specific purpose should not be used or disclosed for another purpose unless there is a lawful basis for doing so (EU, 2016).

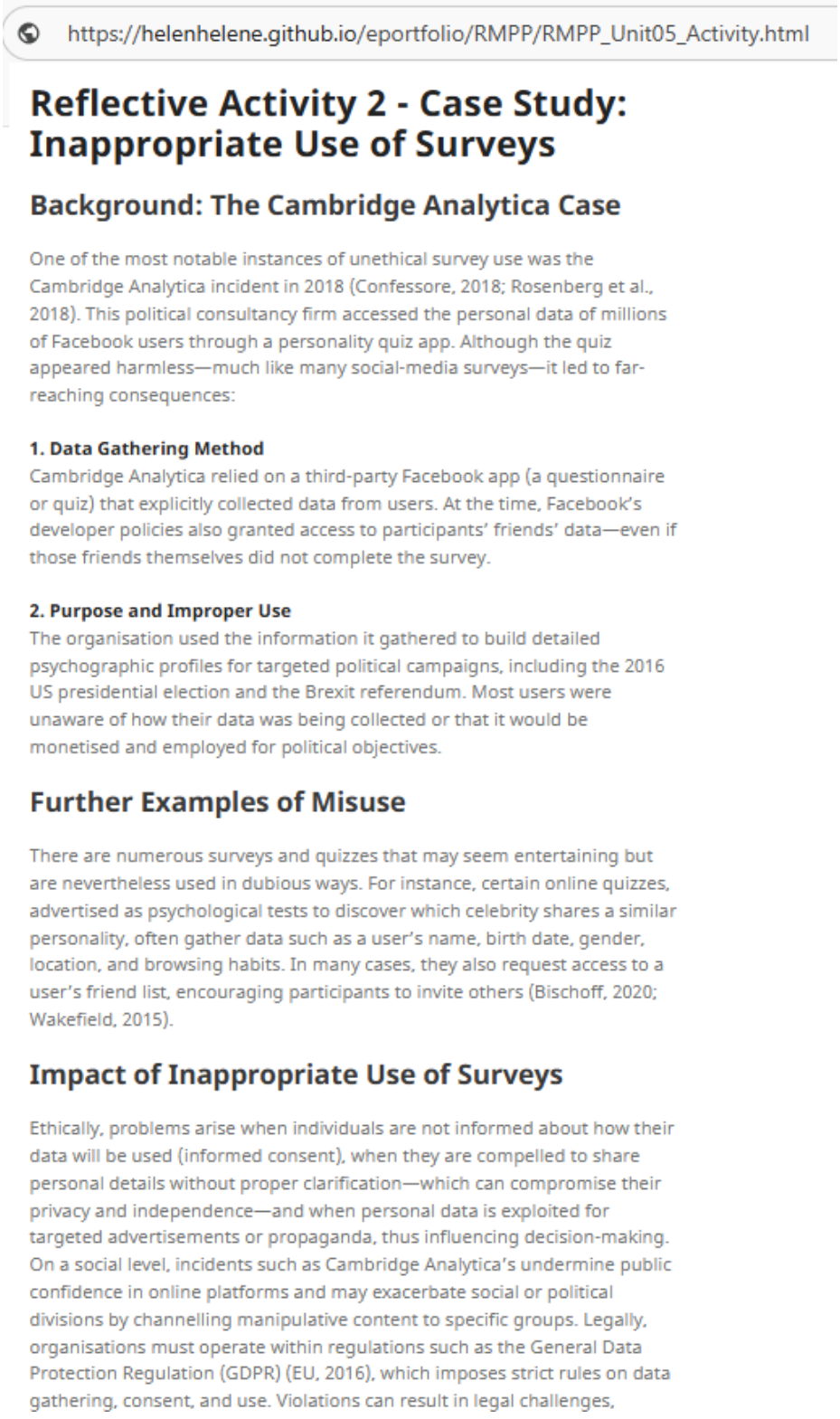
1. Privacy and Confidentiality Individuals have a right to keep their personal details private. Granting Beth access to identifying information without appropriate authorisation could breach confidentiality.

2. Data Minimisation Under GDPR, only data strictly necessary should be processed (Art. 5 GDPR, 1c)(EU, 2016). If Beth only needs direct contact details in exceptional cases (e.g., with the individuals' consent), providing full access to all personal data could be excessive and in breach of data minimisation requirements.

3. Lawful Grounds for Processing GDPR dictates that personal data can only be processed if there is a valid lawful basis (Art. 6 GDPR)(EU, 2016). Beth's purpose may be legitimate from a scientific standpoint, but does not automatically override privacy rights.

Discussion

Appendix 8: Case Study - Inappropriate Use of Surveys



https://helenhelene.github.io/eportfolio/RMPP/RMPP_Unit05_Activity.html

Reflective Activity 2 - Case Study: Inappropriate Use of Surveys

Background: The Cambridge Analytica Case

One of the most notable instances of unethical survey use was the Cambridge Analytica incident in 2018 (Confessore, 2018; Rosenberg et al., 2018). This political consultancy firm accessed the personal data of millions of Facebook users through a personality quiz app. Although the quiz appeared harmless—much like many social-media surveys—it led to far-reaching consequences:

1. Data Gathering Method
Cambridge Analytica relied on a third-party Facebook app (a questionnaire or quiz) that explicitly collected data from users. At the time, Facebook's developer policies also granted access to participants' friends' data—even if those friends themselves did not complete the survey.

2. Purpose and Improper Use
The organisation used the information it gathered to build detailed psychographic profiles for targeted political campaigns, including the 2016 US presidential election and the Brexit referendum. Most users were unaware of how their data was being collected or that it would be monetised and employed for political objectives.

Further Examples of Misuse

There are numerous surveys and quizzes that may seem entertaining but are nevertheless used in dubious ways. For instance, certain online quizzes, advertised as psychological tests to discover which celebrity shares a similar personality, often gather data such as a user's name, birth date, gender, location, and browsing habits. In many cases, they also request access to a user's friend list, encouraging participants to invite others (Bischoff, 2020; Wakefield, 2015).

Impact of Inappropriate Use of Surveys

Ethically, problems arise when individuals are not informed about how their data will be used (informed consent), when they are compelled to share personal details without proper clarification—which can compromise their privacy and independence—and when personal data is exploited for targeted advertisements or propaganda, thus influencing decision-making. On a social level, incidents such as Cambridge Analytica's undermine public confidence in online platforms and may exacerbate social or political divisions by channelling manipulative content to specific groups. Legally, organisations must operate within regulations such as the General Data Protection Regulation (GDPR) (EU, 2016), which imposes strict rules on data gathering, consent, and use. Violations can result in legal challenges,

Appendix 9: e-Portfolio

https://helenhelene.github.io/eportfolio/

Helen SIU

View My LinkedIn Profile

View the Project on GitHub
HelenHelene/eportfolio

This project is maintained by
HelenHelene

Hosted on GitHub Pages — Theme by orderedlist

E-Portfolio of

Helen SIU

Professional Profile

University of Essex Learning Experience

- Induction Module
- Module 1 Launching in Computer Science
- Module 2 Object Oriented Programming
- Module 3 Network Security
- Module 4 Information Security Management
- Module 5 Software Engineering Project Management
- Module 6 Secure Software Development
- Module 7 Research Methods and Professional Practice
- MSc Computing Project and Dissertation

Appendix 10: SWOT Analysis

https://helenhelene.github.io/eportfolio/RMPP/RMPP_Unit11_SWOTAnalysis.pdf

University of Essex

	Helpful to achieving the objective	Hamper achieving the objective
Internal origin (attributes of the system)	Strengths 1. Robust Time Management Skills: Owing to professional experience that demands meeting multiple deadlines, capable of organising tasks effectively. 2. Technical Competence in Data Analysis: Reinforced by statistical worksheets and practical exercises in Excel/Power BI, building confidence for both academic and professional tasks. 3. Ethical Awareness: Heightened understanding of codes of conduct (ACM/BCS) and data privacy regulations (GDPR, PDPO) derived from collaborative discussions and case studies, promoting responsible research practices.	Weaknesses/Areas for further development 1. Overreliance on Lists: Tutor feedback suggests avoiding bullet points in critical discussions; a habit that needs adjustment for more nuanced academic writing. 2. Need to Broaden Methodological Toolkit: Despite progress with quantitative methods, more advanced qualitative techniques (e.g. in-depth interviews, thematic analysis) may still require further exploration and practice. 3. Focus on Narrative Depth: Transitioning from succinct, point-form style to a more thorough academic narrative requires additional practice to integrate multiple viewpoints within each paragraph.
External origin (attributes of the environment)	Opportunities 1. Industry-Relevant Topics: Delving into pressing cybersecurity challenges (ransomware, data breaches) creates scope for future professional or research collaborations, especially in Hong Kong's financial sector. 2. Interdisciplinary Projects: Engaging closely with legal, ethical, and technical dimensions could open cross-disciplinary research (e.g. risk mitigation framework that incorporates economic modelling and legal compliance). 3. Tutor and Peer Feedback: Consistent constructive feedback not only enhances academic rigour but also provides the impetus to incorporate multiple citations, create well-structured arguments, and refine project ideas.	Threats 1. Rapidly Changing Regulatory Landscape: Emerging ethical and legal changes in AI, data privacy, and cybersecurity can outpace research if not monitored consistently, complicating the development of a stable research framework. 2. Potential Overextension: Balancing part-time study, work experience, and additional commitments may result in insufficient time for deeper exploration or refined project outputs. 3. Evolving Cybersecurity Landscape: New forms of ransomware and malware could undermine existing frameworks before project completion, requiring agile adaptation and updated research.

Kaplan Open Learning 2019

Appendix 11: Action Plan

https://helenhelene.github.io/eportfolio/RMPP/RMPP_Unit11_ActionPlan.pdf

Where do I want to be by the end of this period/year? What do I want to be doing? (Include as many learning needs as required to achieve agreed objectives)

What do I want/need to learn? Provide a specific description of the desired changes (e.g. skills to gain, knowledge to acquire, topics/themes/content to cover)	**What do I have to do to achieve this?** Some examples, a new/ongoing course, conference, self-development (like wider research or reading), coaching/mentoring, job shadowing	**What resources or support will I need?** Some examples, teaching staff support, library support, student advisor support, line manager, etc.	**How will I measure success?** Some examples, appraisals, course assessments, team feedback, tutor feedback	**Target dates for review and completion** Note that these need to be realistic/achievable
Strengthen my research methods and academic writing skills - Refine techniques in literature searching and thematic analysis. - Improve clarity and structure in academic writing. - Gain deeper insight into quantitative and qualitative methods.	- Continue practising research planning and drafting outlines for clarity. - Attend online or in-person academic writing and research methods workshops. - Practice summarising data using tools like Excel and Power BI to enhance my confidence in data handling.	- Access to online journals and library databases for extended reading. - Obtain feedback from tutor on outline submissions (with guidance on structuring the literature review as an Introduction, main Discussion, and Conclusion).	- Receive positive tutor feedback on clarity, structure, and critical thinking in upcoming assignments. - Achieve excellent grades in summative assessments (e.g. research proposals, literature reviews).	- Review: Completion of Assignment 1 and Assignment 2. - Completion: By the end of the module's final assessment.
Develop ethical awareness and adherence to professional codes of conduct: - Deepen knowledge of ACM/BCS codes of ethics and how to apply them in research and workplace scenarios. - Understand legal frameworks like GDPR and Hong Kong's PDPO for handling sensitive data.	- Investigate practical case studies aligning them with code of conduct guidelines. - Integrate frequent citations to support ethically grounded arguments in research. - Seek additional training or mini-courses on data protection principles.	- Guidance from Academic Ethics team or module tutor. - Discussion forums and collaborative group tasks for peer learning. - Access to professional guidelines (ACM, BCS) and legal documents.	- Tutor feedback on ethical considerations in assignments and discussions. - Demonstrated ability to incorporate multiple references per paragraph to show critical debate. - Recognition of ethical compliance in peer or tutor appraisals.	- Review: Ongoing after each collaborative discussion. - Completion: End of the research proposal assignment.
Enhance data analysis and visualisation expertise: - Apply descriptive and inferential statistics accurately. - Master data visualisation tools, including Excel and Power BI, especially for summarising research findings. - Understand how to interpret charts and graphs effectively in written reports and presentations.	- Follow set worksheets and tasks (e.g. the unit's statistical worksheets) promptly and seek tutor or peer feedback. - Practise with real or sample datasets beyond coursework (where feasible). - Attend a self-learning Power BI course focusing on advanced data visualisation.	- Access to statistics software or Excel, Power BI licenses. - Online tutorials, user guides, or short training sessions.	- Submission of statistical worksheets and receiving favourable formative feedback. - Noticeable improvement in clarity and accuracy of charts in research drafts or team presentations. - Confident demonstration of visuals during e-Portfolio reviews.	- Review: After completion of statistical worksheets submission (Unit 10). - Completion: Used proficiently in final e-Portfolio submission (end of module).
Improve project management and risk mitigation skills: - Focus on establishing realistic timelines. - Understand key principles of project planning. - Learn to balance multiple deliverables (literature review, research proposal, e-Portfolio) without overextending.	- Enrol in brief project management crash courses or consult relevant textbooks. - Use templates for scheduling, risk logs, and milestone tracking. - Seek mentorship or advice from tutors/peer experienced in project delivery.	- Access to project management tools like Trello or other scheduling software. - Tutor or mentor's support in aligning academic tasks with professional project management best practices. - Peer support for shared learning on group tasks.	- Meeting all assignment deadlines without needing multiple extension requests. - Demonstrating a well-structured project timeline in the research proposal. - Favourable feedback from tutor regarding planning effectiveness.	- Review: Ongoing checks every 2–3 weeks. - Completion: By the end of the module, ensuring readiness for Capstone project planning.
Consolidate reflective practice and professional development: - Hone reflective writing, linking theory to practice effectively. - Build a cohesive e-Portfolio that records progress, insights, and lessons from each artefact/project activity. - Develop a continuous learning mindset, ensuring reflection beyond this module.	- Maintain a learning log or journal to document tasks, outcomes, and reflections. - Engage with tutor or peer review on e-Portfolio structure and content.	- Access to university e-Portfolio portals and templates. - Advice from the module tutor or academic writing centre on reflective writing standards. - Peer support and feedback on e-Portfolio drafts.	- Completion of the e-Portfolio with clear evidence of personal development and skill acquisition. - Positive tutor feedback on reflection quality and overall structure. - Demonstration of improved reflective practice in final self-assessment.	- Review: Midway when partial e-Portfolio is drafted. - Completion: Final e-Portfolio submission deadline.

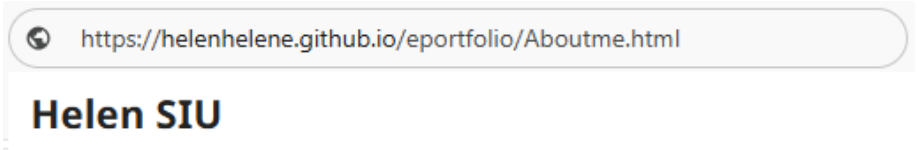
Appendix 12: Matrix

https://helenhelene.github.io/eportfolio/RMPP/RMPP_Unit11_Matrix.pdf

Professional Skills Matrix.xlsx

Competency	Essex Graduate	Skill	Skill Level	Evidence (MSc Computer Science Programme as a Whole)	Evidence (RMPP Module)
Professional	Literacy, Communication, Language Skills	Express information effectively to technical and non-technical audiences	Proficient	Through report writing in various modules and presentations (SEPM, SSD, RMPP), as well as team projects and Collaborative Discussions, I have developed structured arguments. The presentation in SEPM especially refined my skill to convey information to non-technical audiences.	Through the two Collaborative Discussions (Codes of Ethics, Whizzz cereal) and reflective tasks (e.g. Literature Review, Research Proposal Presentation), I have communicated ideas using structured, well-supported arguments. The depth of content in assignments demonstrates clear reasoning on complex issues, such as in the Literature Review Assignment.
		Create documents to aid your communication (reports, diagrams, legal descriptions, plans, manuals and charts)	Proficient	Across different modules, I have strengthened my reporting skills by integrating text with UML diagrams, Gantt charts, and other visuals. This has also benefitted my professional career, where formal documentation is vital.	Assignments (e.g. Literature Review, Research Proposal) and e-Portfolio artefacts show my ability to structure formal documents and incorporate visuals (charts, process flows). The systematic layout of the SWOT and Action Plan tables further highlights effective documentation abilities.
	Commercial Awareness	Keep current with tools of the industry, as well as emerging technology	Expert	Throughout the MSc journey, I have researched and experimented with different integrated development environment (IDE), scanning tools in the Network Security module, and learned to add subtitles to presentation videos in SEPM.	Familiarity with Power BI and Excel for data analysis (statistical worksheets in Units 7–10) demonstrates an up-to-date skill set. I also employed new tools (e.g. adding subtitles to recorded presentations), indicating adaptability in using emerging technologies.
		Seek opportunites to improve and share knowledge of tools and technology that may improve productivity	Expert	During the MSc in Computer Science, I have exchanged knowledge on various tools with peers, especially in SEPM and SSD modules. I improved my proficiency in project management tools like Trello, and explored various IDEs for coding in OOP and SSD modules, sharing tips in group discussions.	In RMPP, I contributed by correcting workshop spreadsheets and demonstrating to my peers how to activate the Data Analysis ToolPak in Excel. I also shared insights on adding subtitles to presentation videos, while my peers provided feedback on resolving technical issues (e.g., JavaScript errors on UoE web pages).
		Participate in scientific and professional organisations	Expert	I participate in Hong Kong's Data Protection Officers' Club (DPOC) and AI Working Group of the German Chamber of Commerce in Hong Kong (AIWG) to stay updated on compliance developments and innovations.	
		Emphasise quality, customer satisfaction and fair application of policies.	Proficient	I demonstrated an understanding of these principles in SEPM by focusing on user requirements and refining the project accordingly.	In my research proposal, I aim to understand the common vulnerabilities and limitations of Small and medium-sized enterprises (SMEs) regarding data breach risks, and I plan to design a toolkit to meet their needs.
		Demonstrate familiriaty with codes of conduct for the Computing field.	Expert		Collaborative Discussions exploring Association for Computing Machinery (ACM), British Computer Society (BCS), General Data Protection Regulation (GDPR), and The Personal Data (Privacy) Ordinance (PDPO) indicated a strong grounding in ethical guidelines. My reflective writing (e.g. Privacy Case Study) showcased an understanding of legal frameworks relevant to both research and professional practice.
	Subject understanding, research, critical thinking, time management	Critically analyse complex ideas in concepts in the field of Computer Science	Proficient		The Literature Review demonstrated a well-structured approach to thematic research. Tutor feedback praised the critical depth but recommended additional pros-and-cons discourse in paragraphs. A positive grade reflected a solid capacity to handle complex cybercrime topics (Ransomware in Hong Kong) with suitable analysis.
		Recognise inconsistencies and gaps in information, and search for additional information when needed...	Proficient		Tutor feedback on my Literature Review highlighted excellent use of relevant resources and effective cross-sectional research, confirming sound information-gathering skills.
		Explore complex real-world problems in a Computing context	Expert		The second Collaborative Discussion on balancing ethical and commercial interests (the Whizzz cereal scenario) prompted reflections on employing strategies such as independent auditing, consulting domain experts, and upholding professional guidelines. These insights have broadened my approach to resolving real-world problems within a computing context.

Appendix 13: Professional Profile



Helen SIU

Professional Qualification

PECB ISO/IEC 27001 Foundation

HKICPA Certified Public Accountant

ACCA Fellow member

Education

MSc Computer Science (In Progress)

Master of Management Science - Accounting

About Me

I am a Certified Public Accountant (CPA) with a Master's degree in Management Science - Accounting. Currently, I am expanding my expertise by pursuing an MSc in Computer Science, which I anticipate completing by 2025. This academic pursuit enriches my role as the **Head of Finance and IT Operation**, where I also serve as the **Data Protection Officer** and **IT Security Officer**. The fusion of finance and technology in my career reflects my commitment to staying at the forefront of industry developments and addressing the complex challenges at the intersection of these fields.

My journey in computer science has been both rigorous and rewarding. I have successfully completed modules in Launching in Computer Science, Object-Oriented Programming, Network Security, Information Security Management, Software Engineering Project Management and Secure Software Development. These courses have established a robust foundation in computational theory, programming paradigms, data protection, and strategies for safeguarding organizational information assets. The remaining modules, Research Methods and Professional Practice, are enhancing my capability to conduct professional research, skills that directly apply to my responsibilities in IT operations and data protection.

In my professional capacity, I apply the insights from my studies to formulate strategies, comprehensive policies, and frameworks aimed at strengthening our organization's cybersecurity posture. I am responsible for implementing robust measures that ensure compliance with data protection regulations and safeguard sensitive data. By leveraging advancements in technology, I plan to drive innovation within IT operations, enhancing efficiency and effectiveness across financial and operational processes.

Integrating my accounting expertise with advanced computer science knowledge uniquely positions me to navigate the challenges at the nexus of finance and technology. My goal is to fortify the technological resilience of my organization and contribute meaningfully to the development of secure, innovative systems. As I progress toward completing my MSc in Computer Science, I remain committed to fostering an environment that prioritizes security, innovation, and strategic growth in the ever-evolving landscape of finance and information technology.