

University of Westminster
School of Computer Science and Engineering
4COSC003W Trends in Computer Science
Module Leader: Dr M. Chondrogianni

Weighting: 60%

CW set: 10/3/21

Deadline: 12/04/21, 13.00pm

Submission: a copy of your reflections needs to be uploaded to the relevant link on BlackBoard before 12/04/21 at 13.00.

CW2: Portfolio

A. Aim

The purpose of this course work is to allow you to acquire and practice different essential learning and professional skills, as per the module's learning outcomes LO1, LO2 and LO5. In particular, it aims to give you the opportunity:

- To reflect on the role of Computer Science as a discipline and its different branches, its relationships to other scientific and technological disciplines, and the social effects it has had.
- To discuss with confidence key features of current trends in Modern Computing and their impact on your career planning and employability prospects.
- To engage in research and work within a commonly accepted academic and professional framework which employs appropriate styles of documentation and referencing.

B. Learning Outcomes (LO)

This course work reflects the module's summative assessment strategy, which involves a Portfolio coursework involving three separate reflections.

LO1 Reflect on the role of Computer Science as a discipline and its different branches, its relationships to other scientific and technological disciplines, and the social effects it has had;

LO2 Discuss with confidence key features of current trends in Modern Computing and their impact on your career planning and employability prospects;

LO3 Summarise the key components of a professional code of conduct and reflect on how the concepts it enshrines will affect your professional life;

LO4 Work as a team to prepare a presentation on the legal and ethical aspects of specified case studies; and produce a report detailing your work.

LO5 Engage in research and work within a commonly accepted academic and professional framework which employs appropriate styles of documentation and referencing.

C. BCS Core module accreditation criteria covered by this course work

2.1.1 Knowledge and understanding of facts, concepts, principles & theories.

2.1.6 Recognise legal, social, ethical & professional issues.

2.1.9 Knowledge of information security issues

2.3.1 Work as a member of a development team

2.3.2 Development of general transferable skills

D. Reflections

You need to engage with all three reflections below. The word limit for each is 800 words (+/- 5%, excluding the References' section). For each reflection, you will need to identify, by undertaking research, a minimum of one appropriate, relevant and reputable source, in addition to other sources provided as part of lectures, tutorials and independent study.

This is an individual piece of work; no two Portfolios can be identical, in part or in full. You cannot use other's work unless you reference it.

1. Employability and career planning- Reflective writing

Write a reflection (800 words) on the way current Trends in Computer Science impact on your career planning.

In your response, you need to discuss

- potential specialisms you are considering as part of your future career;
- option modules at levels 5 and 6 you are considering, which will help you achieve your career aims;
- an employability related event you attended or planning to attend (see Engage for more information on events organised by the University and opportunities to meet a career advisor) and how it supported/ will support your future career;
- what further steps you need to take in order to prepare for your future career as part of your studies.

In your response you need to refer to at least one appropriate and trustworthy source, and include it in your References' section.

You will find useful the information below on reflective writing.

Reflective writing includes

- a short description of the activity/project/ subject etc. in question;
- an analysis/interpretation of the outcome: thinking in depth and from different perspectives and trying to explain the outcome;
- this might involve thinking what a specific subject, piece of work, or achievement means to you and your on-going progress as a learner.

The analysis is followed by an evaluation and a set of actions to be taken.

Evidence of critical reflection is demonstrated by the learner's awareness that actions are needed to be taken.

2. AI and Ethics- report writing

Write a short report (800 words) to outline the advances Artificial Intelligence has made; its impact on society; and the ethical questions AI applications might be raising.

In your report you will need to introduce Artificial Intelligence and explore its impact on society and the ethical questions raised either by discussing in depth a single area of application (such as the marking algorithm for the 2020 GCSE/A Level results; facial recognition applications; employment related applications, among others) or take a broader view of different types of applications and their impact.

You will need to use at least one reputable and trustworthy source in addition to references provided as part of lectures/ tutorials/ independent study and include all sources you use in the References' section.

Your report needs to be divided into **numbered** sections, starting with an introduction. The final two sections will be the Conclusion and the References section.

3. Internet of things and its cyber security implications- report writing

Write a short report (800 words) to discuss the Internet of Things and its Cyber Security implications. In your report, you will need to introduce the Internet of Things; discuss its difference from the traditional internet; explore the challenges it creates for cyber security; and touch upon ways these challenges can be resolved.

You will need to use at least one reputable and trustworthy source in addition to references provided as part of lectures/ tutorials/ independent study and include all sources you use in the References' section.

E. Further information on Referencing

All three reflection should include a separate References section, where the sources you consulted/referred to in your work are listed. You might use either an alphabetic referencing system such as the Westminster Harvard or a numerical referencing system such as the IEEE/Vancouver referencing system. Information on referencing can be found in your course Handbook as well as at the Library self-help guide on 'How to reference your work', available at

<https://libguides.westminster.ac.uk/referencing>
and <https://libguides.westminster.ac.uk/referencing/examples>

F. Marking scheme

The marking scheme for this course work can be found on pages 4-5 of this document.

G. Avoid Academic Misconduct

Please avoid committing an act of academic misconduct, such as Plagiarism. Before submitting your coursework, do consider the Academic Regulations section 10, which can be accessed at

<https://universityofwestminster.sharepoint.com/sites/00262/Shared%20Documents/Academic%20Regulations/Handbook%20of%20Academic%20Regulations%202020.pdf#search=handbook%20of%20academic%20regulations%20section%2010>

Your tutor and module leader will be able to advise you and support you on any questions you might have.

4COSC003W Trends in Computer Science
Module Leader: Dr Maria Chondrogianni
Academic Member of Staff marking this CW:
Tutorial slot:

CW2 Portfolio (weighting 60%)

Student Name:
Student ID:
Group:
Student Course:
Overall mark:

/100

Marking Scheme	Marker's Comments	Mark
1. Relevance of reflections i. How relevant is the content to the requirements of the task? ii. How accurate is the information presented?	Full marks will be given to students who submit work which directly discusses all aspects of each reflection, and where the content's accuracy is supported through in-text citations.	/30
2. Confidence in discussing current Trends in Computer Science How confident is the student in exploring different Trends in Computer Science?	Full marks will be given to students who are able to extend taught material through research and offer a synthesis of different topics.	/15
3. Structure and coherence Do the reflections follow an appropriate structure (i.e. reflective/report writing)? Is the information presented coherently?	7-10 marks: excellent structure, excellent use of bridges across sections 4-8 marks: good/very good structure and coherence (e.g. attempt to introduce/conclude the topic, clear analysis) 0- 3 marks: problematic structure and coherence	/15
4. Evaluative/ analytical skills and support for claims. To what extent is there evidence of critical reflection? To what extent are claims supported by research?	Students will receive full marks if they demonstrate that their arguments are based on research. A minimum of one reputable source is expected to be referred to in addition to sources provided in class.	/15
5. Referencing To what extent is in-text referencing accurate? To what extent is the References' section accurate?	Full marks will be given for students who use an alphabetical or a numerical referencing system accurately.	/10

6. Writing style To what extent is the language used appropriate?	Full marks will be allocated to students who use appropriate academic language (1 st person for reflective writing; 3 rd person for report writing).	/10
7. Word count To what extent do the reflections meet the word limit requirement?	Full marks will be allocated to students who respected each reflection's word limit (800 words +/-5%, excluding the References section).	/5
		Total mark:/100

Comments:

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