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| **COURSEWORK ASSIGNMENT** | |
| **Module Title: Advanced Research topics in Computer Science** | **Module Code: 7COM1084** |
| **Assignment Title: Final Report Portfolio** | **Individual Assignment** |
| **Tutor**: Gabriella Lakatos | **Internal Moderator**: Dr Volker Steuber |

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| Notes for students:  Penalties for Late Submissions   * Late submission of any item of coursework for each day or part thereof (or for hard copy submission only, working day or part thereof) for up to five days after the published deadline, coursework relating to modules at Levels 0, 4, 5, 6 submitted late (including deferred coursework, but with the exception of referred coursework), will have the numeric grade reduced by 10 grade points until or unless the numeric grade reaches or is 40. Where the numeric grade awarded for the assessment is less than 40, no lateness penalty will be applied. * Late submission of referred coursework will automatically be awarded a grade of zero (0). * Coursework (including deferred coursework) submitted later than five days (five working days in the case of hard copy submission) after the published deadline will be awarded a grade of zero (0). * Where genuine serious adverse circumstances apply, you may apply for an extension to the hand-in date, provided the extension is requested a reasonable period in advance of the deadline. |
| Please refer to your student handbook for details about the grading schemes used by the School when assessing your work. Guidance on assessment will also be given in the Module Guide. |
| Guidance on avoiding academic assessment offences such as plagiarism and collusion is given at this URL: <http://www.studynet.herts.ac.uk/ptl/common/LIS.nsf/lis/citing_menu> |

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| **ASSIGNMENT BRIEF** | | |
| **This Assignment assesses the following module Learning Outcomes (Take these from the module DMD):**  ***Knowledge and understanding:***   1. Have a conceptual understanding of how established techniques of research are used to create and extend existing knowledge in computer science. 2. Be able to identify a research problem from synthesizing problem definitions from relevant literature. 3. Demonstrate originality in proposing alternative solutions within a chosen area.   ***Skills and attributes***   1. Critically evaluate research literature and identify research problems to solve 2. Demonstrate ability to propose alternative approaches for future work in a chosen area. 3. Communicate research knowledge effectively in scholarly manner. | | |
| **Assignment Brief:**  Please see attached pages below (pages 4-8). | | |
| **Submission Requirements:**  The complete portfolio should be uploaded to the canvas site for this module by 12.00pm (noon) on Monday 31st March 2025. | | |
| This assignment is worth 70 **%** of the overall assessment for this module.  **Marks awarded for:**  Appropriate format structure and grammar. Clarity of writing. 20%  Appropriate use of citations and references. 10%  Demonstration of understanding of the research areas and literature. 25%  Demonstration of ability to identify research questions. 20%  Demonstration of ability to identify and evaluate research methods. 25%  A note to the Students:   1. For undergraduate modules, a score above 40% represent a pass performance at honours level. 2. For postgraduate modules, a score of 50% or above represents a pass mark. 3. Modules may have several components of assessment and may require a pass in all elements. For further details, please consult the relevant Module Guide or ask the Module Leader. | | |
| Typical (hours) required by the student(s) to complete the assignment: 30 hours (incl self directed study) | | |
| **Date Work handed out:**  28/2/2025 | **Date Work to be handed in:**  31/3/2025 | **Target Date for the return of the marked assignment:**  28/4/2025 |
| **Type of Feedback to be given for this assignment:**  Written on Canvas | | |

**7COM1084: Advanced Research Topics in Computer Science**

**Portfolio Coursework.**

**Contribution to overall marks 70%**

Due: Monday 31th March 2025 by 12.00pm (noon). To be uploaded to the module canvas site.

**This assignment is individual you should complete it on your own.**

**Details of the assignment**

The assignment consists of a portfolio of Research reports. The portfolio should have the following contents:

1.Title page showing the Module code, your name student number and the words Portfolio Coursework.

**Task One (80%):**

Write a referenced report on **TWO** of the topics covered on the course. There have been 8 specialism lectures, please select 2 of them for your reports.

* Human Robot Interaction 1
* Human Robot Interaction 2
* Software Engineering 1
* Software Engineering 2
* Cybersecurity
* Data Science 1
* Data Science 2
* AI

As part of your tutorial work you have been discussing areas on each topic and given support in doing this. Choose **TWO** topic areas, where a topic seems quite broad, you can choose an aspect of it.

**ONE** topic should be on your chosen degree and **ONE** on any of the remaining areas

The report should each follow this format.

1. **Title/research subject area**
2. **Presented by** (the lecturer’s name)
3. **Research area:** A brief description of the area (150 words)
4. **Relation to Computer Science in general:** What other areas in Computer Science and Science in general does the area relate to? (150 words)
5. **Research questions and methods:** Identify a significant research question in this area. What methods could be used to investigate this question. Evaluate the effectiveness of these methods. (around 150 words)
6. **General relevance:** What relevance does this kind of work have in general? How might it be generally helpful? Are there any possible negative implications? (around 200 words)

**Assessment criteria**

Appropriate format structure and grammar. Clarity of writing. 20%

Appropriate use of citations and references. 10%

Demonstration of understanding of the research areas and literature. 25%

Demonstration of ability to identify research questions. 20%

Demonstration of ability to identify and evaluate research methods. 25%

**Task Two (20%):**

Write a referenced short (200 word) report on the topic:

**“Hot Research areas in your degree area of Computer Science in the next decade”**

**Assessment criteria**

Appropriate format structure and grammar. Clarity of writing. 20%

Appropriate use of citations and references. 10%

Well argued and referenced viewpoint 70%

You need to select **TWO topics and All work** should be supported by citations and adequate references.

**Final Portfolio mark distribution breakdown:**

| Final Portfolio | | |
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| **Criteria** | **Ratings** | **Pts** |
| Task 1 – Report 1 Formatting  Appropriate format, structure and grammar, clarity of writing. |  | 8 pts |
| Task 1 – Report 1 Referencing  Appropriate use of citations and references. |  | 4 pts |
| Task 1 – Report 1 Understanding  Understanding of the research area and literature. |  | 10 pts |
| Task 1 – Report 1 Research Questions  Demonstration of ability to identify research questions. |  | 8 pts |
| Task 1 – Report 1 Evaluation  Demonstration of the ability to identify and evaluate research methods. |  | 10 pts |
| Task 1 – Report 2 Formatting  Appropriate format, structure and grammar, clarity of writing. |  | 8 pts |
| Task 1 – Report 2 Referencing  Appropriate use of citations and references. |  | 4 pts |
| Task 1 – Report 2 Understanding  Understanding of the research area and literature. |  | 10 pts |
| Task 1 – Report 2 Research Questions  Demonstration of ability to identify research questions. |  | 8 pts |
| Task 1 – Report 2 Evaluation  Demonstration of the ability to identify and evaluate research methods. |  | 10 pts |
| Task 2 Formatting.  Appropriate format, structure and grammar, clarity of writing. |  | 4 pts |
| Task 2 Referencing  Appropriate use of citations and references. |  | 2 pts |
| Task 2 Argument  Well argued and referenced viewpoint. |  | 14 pts |
| Total marks: 100 | | |

**Rubric describing marking criteria for the whole portfolio (100 marks)**

