

1st SIT COURSEWORK 01 Question Paper

Autumn Semester 2024

Module Code: CU6051NT

Module Title: Artificial Intelligence

Module Leader: Mr. Zishan Siddique / Dipeshor Silwal (Islington

College)

Coursework Type: Individual

Coursework Weight: This coursework accounts for 25% of your total module

grades.

Submission Date: Wednesday, 25 December 2024

When Coursework is

given out:

Week 04

Submission Submit the following to Itahari International College's

Instructions: MST portal before 01:00 PM on the due date:

Report in PDF format

Warning: London Metropolitan University and Itahari International

College takes Plagiarism seriously. Offenders will be dealt

with sternly.

© London Metropolitan University

Plagiarism Notice

You are reminded that there exist regulations concerning plagiarism.

Extracts from University Regulations on Cheating, Plagiarism and Collusion

Section 2.3: "The following broad types of offence can be identified and are provided as indicative examples

- (i) Cheating: including copying coursework.
- (ii) Falsifying data in experimental results.
- (iii) Personation, where a substitute takes an examination or test on behalf of the candidate. Both candidate and substitute may be guilty of an offence under these Regulations.
- (iv) Bribery or attempted bribery of a person thought to have some influence on the candidate's assessment.
- (v) Collusion to present joint work as the work solely of one individual.
- (vi) Plagiarism, where the work or ideas of another are presented as the candidate's own.
- (vii) Other conduct calculated to secure an advantage on assessment.
- (viii) Assisting in any of the above.

Some notes on what this means for students:

- (i) Copying another student's work is an offence, whether from a copy on paper or from a computer file, and in whatever form the intellectual property being copied takes, including text, mathematical notation and computer programs.
- (ii) Taking extracts from published sources without attribution is an offence. To quote ideas, sometimes using extracts, is generally to be encouraged. Quoting ideas is achieved by stating an author's argument and attributing it, perhaps by quoting, immediately in the text, his or her name and year of publication, e.g. " e = mc2 (Einstein 1905)". A reference section at the end of your work should then list all such references in alphabetical order of authors' surnames. (There are variations on this referencing system which your tutors may prefer you to use.) If you wish to quote a paragraph or so from published work then indent the quotation on both left and right margins, using an italic font where practicable, and introduce the quotation with an attribution.

Further information in relation to the existing London Metropolitan University regulations concerning plagiarism can be obtained from http://www.londonmet.ac.uk/academic-regulations

CONTRACT CHEATING

Contract cheating (also known as assessment outsourcing, commissioning or ghost writing) is when someone seeks out another party, or Al generator service, to produce work or buy an essay or assignment, either already written or specifically written for them or the assignment to submit as their own piece of work.

Contract cheating undermines the integrity of the academic process and devalues the qualifications awarded by the university. Students are reminded that academic integrity is a fundamental principle of our institution. Engaging in contract cheating not only impacts the individual's academic record but also the reputation of the university.

Students are encouraged to seek support if they are struggling with their coursework. The university offers a range of resources, including academic counselling, tutoring services, and workshops on study skills and time management. Utilizing these resources can help students achieve their academic goals without resorting to dishonest practices.

Penalty:

- Failure in the Module: The student must re-register for the same module, and the re-registered module will be capped at a bare pass.
- Ineligibility to Continue on the Course: Where re-registration of the same module, or a suitable alternative, is not permissible, the student will not be able to continue on the course. Additionally, the following penalty will be applied to the student's final award:
 - Undergraduate Honors: The student's final classification will be reduced by one level.
 - Unclassified Bachelors: Downgraded to Diploma in Higher Education.
 - Foundation Degree: Distinction downgraded to Merit; Merit downgraded to Pass; Pass downgraded to Certificate in Higher Education.
 - Masters: Distinction downgraded to Merit; Merit downgraded to Pass;
 Pass downgraded to Postgraduate Diploma.

Reporting and Consequences:

Instances of contract cheating will be thoroughly investigated, and students found guilty will face the penalties outlined above. It is the responsibility of every student to ensure that their work is their own and to avoid situations that could lead to accusations of academic misconduct. By adhering to these standards, students contribute to a fair and equitable academic environment, ensuring the value and recognition of their qualifications are maintained.

Coursework 1

Coursework 1 is a research work that students need to carry out on the following or similar AI Topics:

- Problem solving and Heuristic Search
- Adversarial search and games
- Natural Processing Language
- Machine Learning
 - Supervised Learning (Classification/Regression)
 - Unsupervised Learning
- Recommendation Systems

The students are free to choose any Al problem/topic of their choice but are required to get the approval from the module leader. The students are required to study and do research on the chosen topic and develop a conceptual solution for the chosen problem. Students are also required to describe the solution using necessary diagrams and pseudocode.

Submission needs to include:

- Report with the following inclusion:
 - Introduction
 - Explanation of the topic/Al concepts used
 - Explanation/introduction of the chosen problem domain/topic
 - Background
 - Research work done on the chosen topic/problem domain
 - Review and analysis of existing work in the problem domain (may include existing projects/research work already done in the problem domain)
 - Solution (proposed solution to the chosen problem)
 - Explanation of the proposed solution/approach to solving the problem
 - Explanation of the Al algorithm/algorithms used
 - Pseudocode of the solution
 - Diagrammatical representations of the solution (flowcharts/state transition diagrams)
 - Conclusion
 - Analysis of the work done
 - How the solution addresses real world problems
 - Further work

Marking Scheme

Component	Marks Allocated
Introduction	15
Background	30
Solution	30
Conclusion	15
Formatting	10

-END-