36106 Data, Algorithms and Meaning

Assessment Criteria

Spring 2018

Assessment Summary:

Deliverable	Description	Type	Weight	Due
Regression and Classification modelling	Part A: Regression Modelling Part B:Classification model for real world dataset	Individual	15% 15%	5th September 18th September
Building and interpreting a classification model	Part A: Building a classification model Part B: Management presentation	Group Individual	25% 15%	7th October 14th October
Analysis and interpretation of unstructured data	Part A: Text analysis of document corpus Part B: Reflective post	Individual	25% 5%	28th October
Total			**100%**	

Additional Information:

- Assessments should be submitted via Canvas.
- Group assignments should have one submission per group, with group members clearly identified on the cover sheet.
- Late submissions are liable to be penalised unless an extension has been negotiated prior to the submission date.

Assessment task 1: Regression and classification modelling

Part A: Data Prep and Regression Modelling
Weight: 15%
Length: 500-1000 words (report)
Due: Sep 5th, 11:59 pm
Individual assignment

Task:
Please see Assessment Brief (to be handed out in Block Session 1)

Assessment Criteria:

SLO	CILO	Assessment Criteria	Weight
2,3,4	2.2 1.2 3.2	• Quality of data exploration (visual + summary stats) • Justification of features selected and model used • Quality of code and accuracy of results	30 20 40
1	1.1	• Appropriate use of CRISP DM framework	10
Sub Total			**100**
Total (%)			**/15**

Part B: Classification model for a real world dataset
Weight: 15%
Length: 500-1000 words (report)
Due: Sep 18th; 11:59 pm
Individual assignment

Task:
Please see Assessment Brief (to be handed out in Block Session 1)
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Assessment Criteria:

SLO	CILO	Assessment Criteria	Weight
2,3,4	2.2 1.2 3.2	• Quality of data exploration (visual + summary stats) • Justification of features selected and model used • Quality of code and accuracy of results	20 20 40
1,5	1.1 5.2	• Appropriate use of CRISP DM framework • Discussion of ethics/privacy issues + mitigation	10 10
Sub Total			**100**
Total (%)			**/15**

Assessment task 2: Building and interpreting a classification model

Part A: Building a classification model
Weight: 25%
Length: 1500-2000 words
(report) Due: Oct 7th, 11:59 pm
Group assignment, group assessed

Task:
Please see Assessment Brief (to be handed out in Block Session 3)

Assessment Criteria:

SLO	CILO	Assessment Criteria	Weight
3,4	1.2 2.2	• Justification of technique selected. • Quality of code and visualisations.	20 30
3,5	2.2 3.3	• Accuracy of results with evidence supporting claims. • Evidence of collaborative work	40 10
Sub Total			**100**
Total (%)			**/25**

Part B: Management presentation
Weight: 15%
Length: Powerpoint presentation, 10 slides max.
Due: Oct 14th, 11:59 pm
Individual

Task:
Please see Assessment Brief (to be handed out in Block Session 3)

Assessment Criteria:

SLO	CILO	Assessment Criteria	Weight
1,5,2	4.1, 5.1 5.2	• Clarity of problem statement, approach taken and results obtained (50%) • Critical evaluation of assumptions and potential ethical issues (these must be stated explicitly) (20%) • Context appropriate communication style (keep the audience in mind!) (30%)	50 20 30
Sub Total			**100**
Total (%)			**/15**

Assessment task 3: Analysis and interpretation of unstructured data

Part A: Text analysis of a document corpus

Weight: 25%
Length: 1500 words
(report) Due: Oct 28th;
11:59 pm Individual
assignment

Task:
Please see Assessment Brief (to be handed out in Block Session 4)

Assessment Criteria:

SLO	CILO	Assessment Criteria	Weight
1,4	1.2 2.4	• Appropriateness of techniques used • Quality of code	20 30
2,3	2.2 3.2	• Quality of presentation and visualizations • Quality of findings and recommendations	20 20
2	4.2	• Clarity and quality of written report	10
Sub Total			**100**
Total (%)			**/25**

Part B: Reflections on the use of text analysis in the workplace (blog post) Weight: 5%
Length: 1000 words
Due: Oct 28th 11:59 pm
Individual assignment

Task:
Please see Assessment Brief (to be handed out in Block Session 4)

Assessment Criteria:

SLO	CILO	Assessment Criteria	Weight
5	5.1	Depth of reflection – interpretation of trends/events, quality of arguments, insights.	60
2	4.2	Presentation – Narrative, quality of writing, coherence	40
Sub Total			**100**
Total (%)			**/5**

Appendix: SLOs and CILOs

Subject Learning Objectives (SLO):

Code	Description	Short description
1	Apply and industry standard analytics methodology.	
2	Interpret, synthesise and communicate insights in a context-appropriate manner.	
3	Articulate strengths, weaknesses and assumptions of algorithms.	
4	Execute and interpret machine learning algorithms.	
5	Demonstrate a critical, ethical perspective on decisions made from algorithmic predictions	

CIC Gradate Attributes (GAs) & Course Intended Learning Outcomes (CILOs)

Graduate Attributes	Course Intended Learning Outcomes
1. Sociotechnical systems thinking	1.1 Understanding relationships & processes within systems
	1.2 Exploring and testing models and describing behaviours of complex systems
	1.3 Making predictions and informing data discovery
	1.4 Making the invisible visible
2. Creative, analytical and rigorous sense making	2.1 Critiquing trends and theoretical frameworks
	2.2 Exploring, interpreting and visualising data
	2.3 Understanding uncertainty, ambiguity and complexity
	2.4 Designing & managing data investigations
3. Create value in problem solving and inquiry	3.1 Developing strategies for innovation
	3.2 Examining and articulating data value
	3.3 Working together
4. Persuasive and robust communication	4.1 Developing communication skills
	4.2 Engaging audiences
	4.3 Informing decision making
5. Ethical citizenship and leadership	5.1 Becoming a reflective data practitioner
	5.2 Embracing ethical responsibilities
	5.3 Leading data science