Technology & Visual Arts

AIDI 1005 Artificial Intelligence for Business Decision Making

Tuesday, 11am-12pm EST

Course Description: The application of Artificial Intelligence (AI) systems can be leveraged to improve business decision making. AI systems support real-time, evidence-based decision making by offering data collection, forecasting and trend analysis. Students explore how AI systems can be used to help make predictions by disseminating large amounts of data to assist with forecasting, planning and resourcing.

Instructor: Archit Garg

Office Hours: Tue 11am – 12pm EST

Contact Information: archit.garg@georgiancollege.ca

Resources: We do not have a single textbook, depending on the topic the instructor will use presentations/notes to illustrate the examples. Supplementary reading material will be provided for each topic to learn and understand the topics.

Expectations for Success:

Students are expected to have the following background:

- Knowledge of basic computer science principles and skills, at a level sufficient to write a reasonably non-trivial computer program.
- Familiarity with the basic probability theory.
- Familiarity with the basic linear algebra

Projects will involve programming and understanding of concepts described in lectures.

Note: You are welcome to share all reading materials and have discussions, but answers to anything that is submitted for grading (exercises, exams, code) must be yours, and yours only.

Evaluation/Grading Rubric

Project 1	20% of the overall grade
Project 2	20% of the overall grade
Project 3	20% of the overall grade
Exam 1	20% of the overall grade
Exam 2	20% of the overall grade

Schedule of Activities:

Week	Date	Lesson	Assignment/ Exam	Due
1	09/06	AI in Project Management and Data Science Process Lifecycle		
2	09/13	Data Science Process Lifecycle Continued & Communication with Stakeholders		
3	09/20	Data Modeling with Cassandra		
4	09/27	Data Modeling with PostgreSQL		
5	10/04	AI/ML in Business and Data Fit & Annotation	Project 1	Tue 4th Oct, 11:59pm EST
6	10/11	Training and Evaluating a Model		
7	10/18	Fundamentals of Natural Language Processing		
	10/24	**Reading Week (24th Oct-28th Oct) No Classes**		
8	11/01	Exam - 1	Exam - 1 Project 2	Tue 1st Nov, 10am – 12 pm EST Tue 1st Nov, 11:59 pm EST
9	11/08	Natural Language Processing Contd.		
10	11/15	Natural Language Processing Contd.		

11	11/22	Natural Language Processing Contd.		
12	11/29	Fundamentals of Statistics	Project 3	Tue 29th Nov, 11:59pm EST
13	12/06	Statistics Contd.		
14	12/13	Exam - 2	Exam - 2	Tue 13th Dec, 10am – 12pm EST

The sequence and content of this syllabus may change due to unanticipated opportunities or challenges, or to accommodate the learning styles of the students.

Due to extenuating circumstances and to accommodate the need for this program to be offered remotely, there may be some modifications to the evaluation/assessment. This has been approved by the Dean of Technology & Visual Arts (TVA), as directed by the Vice President, Academic.