

# Graduate Certificate in Artificial Intelligence with Machine Learning AIGC 5503 – AI For Business Decision Making Summer 2025

## Assignment 2: State-of-the-Art in Applied AI for Business Decision Making

Due on: July 28, 2025 at 11:59 PM

Plagiarism and the use of any form of generative AI will result in a zero grade for this assignment at the least. Please always cite your sources.

#### **Submission guidelines:**

- For this assignment, you will need to submit 1 PowerPoint file and 1 Video Recording File (MP4).
- Name the Files as follows: firstname lastname Assignment2
- Go to the course Blackboard → Assignments folder → Assignment 2 → and submit the files.
- Include the link to the paper in your submission. (Submission Note)

### **Assignment Description:**

Throughout the course, we have explored many traditional AI models and solutions to provide insight and drive data-driven business decision-making. However, the field of AI is a rapidly evolving area with many state-of-the-art models and tools being developed and released every year. This assignment will provide you with experience in researching the current state-of-the-art and keeping up-to-date with the latest in AI.

#### **Assignment Task:**

- For this assignment, you will select an area of Business Intelligence that we have discussed in the course (customer segmentation, purchasing patterns, Time Series Analysis, business optimization, etc).
- In the area that you have chosen, find **one recent (not older than 5 years) research paper** that proposes a machine learning approach that can be applied to tackle a similar problem to your area.
- Prepare a 10-15 minute presentation on the paper.
- Prepare a **video recording of your presentation**. (Microsoft Teams can be used to record your presentation)



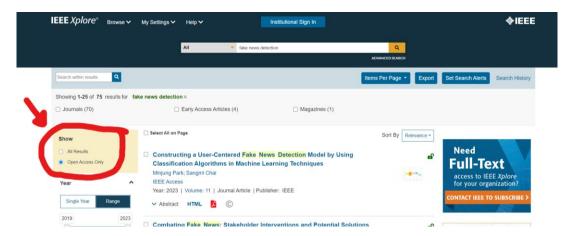
#### **Presentation Outline:**

Your presentation should cover the following material:

- Brief Summary of the paper?
- Explanation of the proposed algorithm (How does it work)?
- How does the paper/algorithm apply to the business decision-making process?
- What are the advantages/benefits of the algorithm?
- How does it compare with some of the algorithms we covered in class (i.e. how does it address some of the limitations of the algorithms we covered)?

#### **Important Notes:**

• A good source for finding IEEE research papers at **no cost** is visiting <a href="https://ieeexplore.ieee.org/">https://ieeexplore.ieee.org/</a> then, after searching for a certain topic, select the "Open Access Only" option as shown below.



#### **Evaluation:**

- 20 % Selected Paper is current and relevant. Link to paper is also provided
- 30% PowerPoint Presentation is well organized, contains many visual aids, and has proper citations (Remember to cite your paper and any additional references).
- 50% Presentation is 10-15 minutes long, clear, good pace, and covers main topics.