Assignment

- **Weight** – 15% (both the report documentation & presentation)
- **Submission Due Date –** November 24/2025
- **Presentation Due Date** – November 25/2025

Group 2 – Assigned Topics

Topic 1: Fuzzy Logic

Your review should analyze the foundational concepts, reasoning mechanisms, applications, and technical methodologies of fuzzy logic. You must include the two core areas provided, but your discussion should not be limited to them: Decision Making under Uncertainty, Fuzzy Control Systems, and others. Fuzzy logic is a broad area in computational intelligence. Your review should demonstrate deeper understanding by including relevant extensions and advanced topics.

Topic 2: AI + Sustainability / Green AI

I. Assignment Overview

For your first group assignment, each group will be given **two AI trend topics** (one classical branch of AI + one emerging trend of AI).

Your task is to review recent scientific literature and prepare a seminar-style report that demonstrates deep understanding, critical analysis, and synthesis of ideas from reputable sources.

You must:

- Identify and explain the fundamental concepts of each topic.
- Break down the main topics and relevant subtopics.
- Support your discussion with recent (2019–2025) scientific papers, conference proceedings, or authoritative technical reports.
- Compare, contrast, or integrate the two assigned topics where appropriate.

II. Expected Report Structure

Your final seminar report must include the following sections. For detailed explanations of each section, please refer to the class presentation slides.

Title Page, Abstract / Precise Summary, Table of Contents, Introduction, Main Body

1. Conclusion - Summarize key insights and academic contributions, Highlight future outlook and research gaps.
2. References - At least you have to review a minimum of 8 –12 recent scientific sources
   - Follow American Psychological Association (APA) referencing style

   Author1, A. A, & Author2, B. B. (Year). Title of the article. *Title of the Journal, volume number* (issue number), page range

   Example: Brown, T., Mann, B., Ryder, N., Subbiah, M., Kaplan, J. D., Dhariwal, P. & Amodei, D. (2020). Language Models are Few-shot Learners. *Advances in neural information processing systems*, *33*, 1877-1901.