

**Originality:**

The project must be genuinely yours. You don't just copy/paste a project, change it, and then claim it. This act will result in having Zero as the mark of this assignment.

**Description:**

This project is a group assignment that requires a team of four to five students to collaborate. The workload should be equally divided among all members. However, each group member needs to have a thorough understanding of the entire project, not just their own part, and be prepared to answer questions during the presentation.

**Project Topic and Requirements:**

The students are required to pick a topic related to the use of AI in autonomous systems. Potential topics include the use of deep learning architectures for autonomous systems, sensor fusion techniques in autonomous systems, AI-driven perception and decision-making in self-driving cars, machine learning algorithms for autonomous navigation, and computer vision techniques in autonomous drones. Then, students are required to do one of the following:

1. Prepare a comprehensive review (survey paper) of their topics, which should include a Comprehensive Literature Review of the topic, Analyze and Synthesize the Literature, and compare and highlight the strengths and weaknesses of different approaches and findings. Finally, students must implement one method of what is being reviewed. Students should include at least 20 papers in their review. <https://www.mdpi.com/1424-8220/20/15/4220>
2. Students contribute to the chosen topic, prepare a report covering the topic, and implement their method.

**Rubric:**

50% for the report and 50% for implementation, presentation, and questions.

**Presentation:**

The instructor will arrange a team demonstration late in the semester.