NATIONAL UNIVERSITY OF SINGAPORE

CEG5303: Intelligent Autonomous Robotic Systems

Assignment (10%)

Please

1. Write your Name, Matriculation Number and Module Code (CEG5303) on the cover page,

2. List your answers and references in order,

3. Duration of this assignment is 14 days.

4. Submit your report to Canvas/Assignment by 3rd February 2025.

5. Feel free to contact GA Zhang Aoqian (e1144122@u.nus.edu), Zhang Binjie (e1106673@u.nus.edu), or Sam Ge (samge@nus.edu.sg) for any queries.

Objective: Describe various types of intelligent autonomous robotic systems from the standpoint of design, operations, applications, safety, etc.

Based on what we learnt from lectures and lecture notes, do your own exploration on the internet and reading materials about various types of intelligent autonomous robotic systems (IARs), write an essay based on the following instructions:

1. Describe three types of intelligent autonomous robotic systems that you like and explain their specific applications, operations, and the usefulness of the design.
2. Explain their system architectures for safety, efficient operations, and economic values.
3. Discuss and design your dream intelligent autonomous systems for the future. Feel free to include graphics or use ChatGPT to help illustrating your design. Explain your reasons and comments on the beauty of your design.

Note that the essay is 2 pages minimum, 5 pages maximum, 1.5 line spacing, 12-point font, 1-inch margins, upload in PDF. Figures are encouraged but are not included in the page count. Include proper citations for all sources (not included in page count).
