COMP47130 Autonomous Robotic Systems: Survey Paper Assignment (30%)

You are expected to write a survey paper on one of the following topics:

- Home Service Robotics
- Tele-operated control of multi-robot systems
- Search & Rescue Robotics

A survey paper, as described by ACM Computing Surveys, is "a paper that summarizes and organizes recent research results in a novel way that integrates and adds understanding to work in the field. A survey article assumes a general knowledge of the area; it emphasizes the classification of the existing literature, developing a perspective on the area, and evaluating trends.".

The survey paper must not exceed 6 pages in length. Ideally, it is of publication quality (you may pretend you are submitting it to ACM Computing Surveys). It should not be just a concatenation of paper reviews. You can decide the angle of your survey paper. For example, you could survey robot R&D activities in your subject of choice, to provide an overview of state of the art and research issues and trends, or focus your survey to only certain issues that must be tackled in a specific application domain, such as networking, object recognition, control architectures, integration with smart environments. You may also decide to narrow down the scope of your paper, for instance, by specializing your survey on research in home service robots developed in Japan (or US), or on Search & Rescue Robots already operating in the field (as opposed to research-focused examples).

A typical structure of a paper includes:
1. Title
2. Abstract
3. Introduction
4. Body of paper
5. References

Read Writing Technical Article (www.cs.columbia.edu/~hgs/etc/writing-style.html) and Common Bugs in Writing (www.cs.columbia.edu/~hgs/etc/writing-bugs.html).

You will be graded based on your writing, presentation, and how it enhances the understanding of the research topic. Criteria include:
- Thoroughness and scope of survey
- Classification of methods and organization of trends
- Critical evaluation of approaches (relative advantage/disadvantages)
- Quality of explanation (draw your own figures, diagram, charts, to score here)
- Reference and Pointer to depth information
- Formatting
- Timeliness in observing the deadlines
- Quality of the bibliography

The deadline is the end of the term. However, you can send your draft to mauro.dragone@ucd.ie any time before the 15th of March, in order to receive an early feedback on the structure of your paper and on your writing.