The title should be expressive; Have less than 20 words; For reports and theses it can be more specific than for books; No special symbols or abbreviations.

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Abstract

The abstract summarises the content of the paper or report and should have 70-200 words (depending on the publisher or other requirements); It should state briefly what the paper is about (maybe also what methods were used), what its (new) results are, why it is important or significant. It can also be useful to state (or indicate implicitly) who is the addressed readership and whether its a review article, a short paper, a pilot study, an extension of previous work or a thesis. Try to avoid special symbols, abbreviations, and citations.

Table of Contents

1 Introduction

There are different ways to write an introduction. Typically it contains background information and a review of literature which indicates how the study fits into the context of other previous work. This way the introduction can address the significance and importance of the study. Major related publications in big journals should be cited as well as closely related other articles. The literature review typically uses newer papers when it tries to address the state-of-the-art of a technique or recent developments. However, when first mentioning a method name the historically first source that introduced that concept should be cited. There are different citation styles and here is an example (Quinlan et al., 2003). The introduction typically motivates the general hypotheses, aims and research questions of a paper, report or thesis.

The research question is important.

Questions raised in the introduction can later be answered in the final discussion.

The introduction often ends with a brief overview of the structure or organisation of the paper, report or thesis.

2 Sections

There can be several sections and subsections that establish the main part: E.g. Background, Methods, Data, Environment or Task, Experiments, Results or similar as appropriate. The individual section titles can be more specific and expressive depending on the topic of your paper.

3 About Honours Theses

The Honours degree and the associated honours thesis are specified in the new UoN "Bachelor Honours Policy" which can be found at the following link

http://www.newcastle.edu.au/policy/000990.html

You have to comply with this policy. It is very general you may find it helpful to adopt some of the details in subsections 3.1 and 3.2 but only as long as they comply with the Honours policy.

3.1 CSSE Honours Thesis Specifications

For several years CSSE required the following specifications for an Honours report:

- Cover page, containing title, student name, submission date and supervisor name.
- Minimum of 50 pages, using 12 point font and double spacing (but at least 10,000 words).
- Minimum of 25 references.

3.2 Assessment

Assessment of an Honours report would typically look points such as:

- Clear understanding of the topic of the work.
- Literature review (analysis, citations, organization, comprehensiveness).
- Clear problem definition and description.

- Methods applied to solve the problem (complexity, suitability).
- Comparison of alternative approaches, identification of the problems.
- Results/analysis/conclusion.
- Report presentation

4 LaTeX

LaTeXis a text processing systems that is commonly used by mathematicians and engineers. It is free and you can find a lot of information on the internet, e.g. at :

http://www.latex-project.org

5 Methods

The description and discussion of the methods can include some theory. Formulas can be in-line like that $a \cdot b = d$ or on a separate line with an equation number that you can refer to

$$a \cdot b = d \tag{1}$$

6 Experiments

Describe and discuss the experimental set-up employed in our study. We also include a test figure here (see Figure 1).

6.1 Results

Include statistical evaluation; tables; graphs.

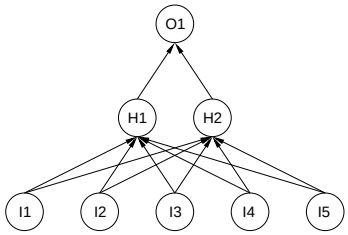

Figure 1: This is to show how to include graphics. Always put a reference in the caption where the graph comes from (this one is from the COMP3330 lectures).

6.2 Just an example table

We include a table to show how it can be done (see Table 1).

Speed (mm/sec)	Methods	Robot	Team, References, Description
170	learned		Sony, (Hornby et al., 1999)??
230	hand-tuned	ERS-210(a)	German Team
245	hand-tuned	ERS-210(a)	Austin
???	hand-tuned	ERS-210(a)	NUbots
254	hand-tuned	ERS-210(a)	UNSW, P-walk of (Hengst et al., 2001)
270	learned	ERS-210(a)	UNSW/NICTA, (Kim and Uther, 2003)
295	learned	ERS-210(a)	NUbots, (Quinlan et al., 2003)
291	learned	ERS-210(a)	Austin, (Kohl and Stone, 2004)

Table 1: History of speed improvements for the Sony AIBO robot.

7 Discussion

Give an extended and detailed discussion of your study. Explain what we can learn from your study.

8 Conclusion

A brief final summary of the main achievements and outcomes. Possibly some suggestions for future work that can follow on from your project.

Acknowledgements

The author is grateful to ....

References

Hengst, B., Ibbotson, D., Pham, S. B., and Sammut, C. (2001). Omnidirectional motion for quadruped robots. In Birk, A., Coradeschi, S., and Tadokoro, S., editors, *RoboCup International Symposium*, volume 2377 of *Lecture Notes in Artificial Intelligence (LNAI)*, page 368. Springer-Verlag.

Hornby, G. S., Fujita, M., Takamura, S., Yamamoto, T., and Hanagata, O. (1999). Autonomous evolution of gaits with the Sony quadruped robot. In *Proceedings Of Genetic and Evolutionary Computation Conference, Vol. 2*, pages 1297–1304. Morgan Kaufmann.

Kim, M. S. and Uther, W. (2003). Automatic gait optimisation for quadruped robots. In *Australasian Conference on Robotics and Automation (ACRA'2003)*.

Kohl, N. and Stone, P. (2004). Policy gradient reinforcement learning for fast quadrupedal locomotion. In *Proceedings of the IEEE International Conference on Robotics and Automation*, volume 3, pages 2619–2624.

Quinlan, M. J., Chalup, S. K., and Middleton, R. H. (2003). Techniques for improving vision and locomotion on the Sony AIBO robot. In *Australasian Conference on Robotics and Automation (ACRA'2003)*.