



Chapter 05 : Writing and presenting a research report

Anglais Et Automatique, L3 A.I.I

By Y.HIMOUR

UNIVERSITY OF KHEMIS-MILIANA

Objectif du chapitre (Selon le Canevas officiel)

- Elaboration d'un exposé dont le thème porte sur l'automatique, Cette activité permet aux apprenants de construire un exposé et le délivrer en anglais devant leurs pairs. Cette activité comporte une condition : son élaboration doit être faite en binôme. Ce qui implique le travail collaboratif. Elle permet aussi d'instaurer un débat en classe sur le thème présenté.

Les thèmes proposés

- The PID controller,
- Modeling and Identification,
- Artificial Intelligence in system control,
- The PLCs,
- The actuators,
- The sensors,
- The feedback control,
- The industrial networks,
- The DCS,
- The micro-controllers,
- Matlab®,
- Applications of system control... etc.

Instructions

- Avoid equations and mathematical developments (3 to 4 equations are enough),
- Try to synthesize your own sentences in writing the report,
- Feel free to preserve the essential sections, and discard sections not convenient with your Topic...
- All works are to be presented in classroom (by all binomials) after winter holidays ...

Organization of the research report

- *As a university student you may be required to write a variety of reports for assessment purposes. A research report is one type that is often used in the sciences and engineering. Here your aim is to write clearly and concisely about your research topic so that the reader can easily understand the purpose and results of your research.*
- *Usually, a research report is organized according to some sections : (Some are optional, others are indispensable)*

The Abstract

Writing an abstract includes briefly **introducing** the general topic of the work and then explaining the exact **research question**, including **the aims**. It should then include a brief description of the **methodology**, the **results** and the **discussion**.

“You can also ask another student to read it for you, as an independent assessor. If they cannot make any sense of your abstract, then it is back to the drawing board.”

The Introduction (1)

- For many students, writing the introduction is the first part of the process, setting down the direction of the paper and laying out exactly what the research paper is trying to achieve.
- For others, the introduction is the last thing written, acting as a quick summary of the paper. As long as you have planned a good structure for the parts of a research paper, both methods are equally good and it is a matter of preference.

The Introduction (2)

A good introduction generally consists of three distinct parts, starting with:

- A general presentation of the research problem. (La problématique...)
- You should then lay out exactly what you are trying to achieve with this particular research project.(L'objectif ...)
- stating your own position.(L'importance du sujet...)

Ideally, you should try to give each section its own paragraph, but short or long papers will vary.

Literature Review (état de l'art)

A literature review will give the reader a clear vision on what has been done in that specified topic of research. It may be useful to do a chronological format where you discuss from the earliest to the latest research. Alternately, you could write in a thematic way, outlining the various themes that you discovered in the research regarding the topic.

Methodology (votre travail)

Here you clearly outline what methodology you used in your research i.e. what you did and how you did it. It must be clearly written so that it would be easy for another researcher to duplicate your research if they wished to.

- A well laid out and logical methodology will provide a great backbone for the entire research paper, and will allow you to build an extremely strong results section.

Results

Present what you found, you give the results of your research, but do not interpret them.

- include clearly titled and labelled graphs, tables and figures as appropriate
- detailed calculations may be provided in the appendix.

Discussion

- This is where you discuss the relevance of your results and how your findings fit with other research in the area. It will relate back to your literature review and your introductory research statement.

Conclusion

This is a summary of the most significant results/findings. You should not include any new material in this section. Sometimes you could indicate some areas where your research has limits or where further research would be useful.

You can include suggestions for what needs to be done as a result of your findings. Recommendations are usually listed in order of priority.

References or Bibliography And Appendices

References or Bibliography

This includes all references used in your report or referred to for background information.

Appendices

If you include appendices they must be referred to in the body of the report and must have a clear purpose for being included.

End of Chapter 05

y.himour@univ-dbkm.dz