

# Human-Centered Artificial Intelligence



UNIVERSITÀ  
DEGLI STUDI  
DI MILANO



UNIVERSITÀ DI PAVIA

## HCAI GUIDELINES FOR WRITING YOUR THESIS

### The purpose of the thesis

Your thesis marks the end of your learning process as an HCAI student. The criteria for a successful thesis depends on its nature. HCAI students have two options.

#### Research Paper

In this case the purpose of your thesis is to investigate a topic in an active research area within the field of AI.

A thesis in this track is successful when it:

- provides a clear and self-contained description of the problem
- Describes the relevance of the problem in the wider research field
- Analyses in sufficient detail the existing literature on the problem
- Provides details of the methodology used to tackle the problem
- Describes the theoretical contribution on the problem and, if appropriate, the analysis of the experimental results

#### Practical Activity or Development Project Report

In this case the purpose of your thesis is to illustrate activities performed during the internship part of the course of study, or to present an artefact (software, robotic platform etc.) with appropriate documentation.

A thesis in this track is successful when it:

- Provides a description of the activities/project section
- Describes its relevance to current industrial/scientific domain section
- Provides details of the methodology used
- Describes the theoretical contribution/experimental contribution of the project/activities
- Illustrates in detail the artifact/program developed with a link to the repository where the source-code and data (if applicable) are made available

## How to structure the thesis

We recommend that the structure of your thesis mirrors closely the goals listed above. The thesis should begin with a brief and to-the-point Introduction, and should end with a short Conclusion. You should pay particular attention to listing carefully all the references you have used in the main body of the thesis. Recall that using material from other sources without citing them qualifies as plagiarism.

## Length and format

A thesis normally is between 40 and 60 pages in our LaTeX template. Exceptions are possible, and should be discussed with your supervisor. Note however that there is no virtue in writing a thesis which is longer than necessary. Note also that your thesis is not a textbook. Since you have read so many, you may be naturally drawn to that style. But it is inappropriate for a thesis. Be thorough on your problem, but bear in mind that nobody expects you to know everything around the subject.

The thesis is written in English. Please put extra-care in proof-reading your work before you submit.

We recommend using the [HCAI LaTeX template](#), which will guarantee a smooth workflow, and contains all the editorial guidelines you must follow, including information required on the title page. We recommend you work on Overleaf, which also ensures continuous backup.

You can also use another format, like an ODT file. Make sure your submission satisfies all guidelines and contains all required information.

## Planning your work

Find a supervisor. The supervisor should be a Member of the Teaching Board of HCAI expert in the area you wish to address in your thesis. If you are planning to write a thesis

on the results of your internships, you should still have a supervisor from the Teaching Board competent to evaluate your thesis to academic standards.

Make sure you share a work-plan with your supervisor at the very beginning of your thesis project. It is quite common for students to underestimate the time required to move from the idea to the write up of the thesis. Also, do not assume that you will be able to write 12 hours a day 7 days a week: leave room for unforeseeable contingencies.

Send regular updates to your supervisor: if you send them the full draft it will be harder for them to give you useful feedback. Agree with them on the ideal frequency of the updates.

If you face unexpected difficulties get in touch immediately with your supervisor. Finding out that things don't work as expected is the norm, rather than the exception, in research. And bear in mind that there is a lot to learn from mistakes. Writing your thesis is, first and foremost, a learning process.