

TECHNISCHE HOCHSCHULE INGOLSTADT

Faculty of Computer Science

**The Future of AI in Air Traffic
Management: Coordinating
Autonomous Airliners and UAM
within Busy Airspaces using AI**

SEMINAR PAPER

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Date: 28 March 2025

The Future of AI in Air Traffic Management: Coordinating Autonomous Airliners and UAM within Busy Airspaces using AI

Affidavit

I certify that I have completed the work without outside help and without using sources other than those specified and that the work has not yet been submitted in the same or a similar form to any other examination authority and has been accepted by them as part of an examination. All statements that have been adopted literally or analogously are marked as such.

Ingolstadt, 28 March 2025

Signature

Abstract

The summary gives the reader a rough overview of the content (brief problem definition, approach, solution approaches and possibly key findings). The scope should be about half a page. This chapter is not mandatory and should only be considered optional.

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Affidavit

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1 Introduction (chapter title is placeholder)

This part of the work should have the following content:

- Introduction to the problem
- Motivation and derivation of the topic
- Structure of the work

A notice: It has proven helpful to compare the introduction with the summary or abstract and conclusion. This ensures that they correspond in terms of content in terms of objectives and motivation.

2 End

The conclusion should (re-)consider

- the topic
- the chosen approach
- the results of the work
- a critical statement/assessment
- next steps

A Appendix

An appendix to the scientific work is necessary if materials that relate to the work as a whole or larger parts of it are difficult to accommodate in the executive section. This is particularly the case if, due to their size, they would disturb the overall context of the execution. In terms of content, the appendix must not contain anything that is necessary for understanding the text, the text of the work must not be continued at this point "under different circumstances". It should not be used to give the work a larger scope and make it appear "thick"! The appendix is suitable for additional documents and materials, especially if these are difficult or impossible for the reader to access, such as unpublished operating documents. Especially in empirical work, the appendix can be used to identify the data sets used, the mathematical-statistical methods used or programs in more detail. If surveys are carried out as part of the investigations, the questions and results must be documented in the appendix. Discussions may only be referred to in the explanations if a result protocol signed by the discussion partner is attached to the work. If the appendix consists of several elements, the individual elements must be separated from one another by numbering.

Note: If the attachment remains empty, this section can be deleted

References

- [1] Dreamer. “Is Dreaming”. In: *Pro Dreamer* (2025).