

Declaration of AI Tools Usage in Scientific Work

such as seminars, research, theses at the Research Group Software Engineering

Title and type of the scientific work (seminar paper, research internship, bachelor's or master's thesis):

**A Study on Trigger-Based Backdoor Injection Techniques in Large Language Models (LLMs) –
(Master's Thesis)**

Submission date:

19.12.2025

1. Overview of the generative AI tools used for this work

Specify which generative AI tools you have used. If you tick 'Yes' for one of the tools, complete the entire template. Otherwise, please skip sections 2 and 3.

Tools	Usage	
	Yes	No
ChatGPT	✓	•
DeepL Write	•	x
Microsoft 365 Copilot	•	x
Neuroflash	•	x
Grammarly	•	x
DeepL Translator	•	x
Google Translate	•	x
Perplexity	✓	•
Elicit	•	x
Explainpaper	•	x
ResearchRabbit	•	x
GitHub Copilot	•	x
Others: _____	✓	•
Claude_		
Quillbot_____		

2. Responsible use of AI tools

Please confirm the following statements.

Statements on the responsible use of tools	Confirmation: Yes
I/we are informed about the capabilities and limitations of the generative AI tools I/we used.	✓
I/we verified that the results given by the tools are accurate or that I/we corrected them.	✓
I/we acknowledge that the responsibility for the work, e.g. paper/thesis, lies with the author(s), not the tools or anybody else.	✓

3. Detailed activities for which the tools were used

Please indicate which tool you used and to what extent for which activity/step.

Activity/step	Description	AI Tools	Usage Description e.g. type of use, affected sections
Ideenfindung & Konzeptualisierung	<ul style="list-style-type: none"> • Ideen, Forschungsziele, Zielsetzungen und Fragen entwickeln • Identifizieren und Definieren relevanter Konzepte 	ChatGPT	Used for brainstorming initial ideas and refining the research.
Literatursuche & -analyse	<ul style="list-style-type: none"> • Suche nach relevanter Literatur • Prüfung von potenziell relevanter Literatur • Zusammenfassungen der relevanten Literatur 	ChatGPT, Claude, Perplexity	Assisted in finding relevant literatures.
Methodik	<ul style="list-style-type: none"> • Suche nach einer geeigneten Methodik • Gestaltung und Anpassung der Methodik an die eigene Forschung 	ChatGPT	Assisted in finding potential methodological approaches.
Coding	<ul style="list-style-type: none"> • Erstellen und Dokumentieren von Code, Algorithmen, Software Testen und • Testen und Debuggen von bestehendem Code, Algorithmen, Software • Verstehen von vorhandenem Code, Algorithmen, Software 	ChatGPT	Assisted with code task mainly for debugging, code organization and reviewing code formatting. -Final code implementation, its modification and ideas were independently contributed by myself

Activity/step	Description	AI Tools	Usage Description e.g. type of use, affected sections
Data collection & analysis	<ul style="list-style-type: none"> Collection of primary or secondary data Qualitative data analysis (including summarising and coding) Quantitative data analysis (including statistics) Mathematical, computational or other formal techniques for modelling, simulation and analytics 	ChatGPT, Claude	Helped with identification of various approaches which would be helpful for different analysis.
Interpretation & validation	<ul style="list-style-type: none"> Interpretation of the results Derivation of implications for research and practice Verification of the general replication / reproducibility of the results and other research findings 	Claude	Helped in exploring different interpretation of the result. -The main and final interpretation of results and scientific conclusions were developed independently by myself.
Structuring & planning the text	<ul style="list-style-type: none"> Structure of the paper/thesis Organisation of the sections of the paper/thesis (e.g. list of points per section) 	Claude	Used for outlining initial structure of the report.
Creating the text	<ul style="list-style-type: none"> Generate text on different topics in different sections of the paper (including title and summary) 	Claude	Assisted with writing task mainly for paraphrasing and improving sentence structure and clarity. -All the final contents, and arguments were refeected and developed from my own ideas and writing.
Translating the text	<ul style="list-style-type: none"> Translating texts written by the authors Translating texts written by others 	-	-

Activity/step	Description	AI Tools	Usage Description e.g. type of use, affected sections
Checking & editing the text	<ul style="list-style-type: none"> Critical review, feedback or revision of the content, organisation or grammar of the work Proofreading Rephrasing or paraphrasing the text Shortening/expanding the text 	Quillbot, Claude	Used for paraphrasing, spelling check, suggesting improvements in sentence structure.
Presentation	<ul style="list-style-type: none"> Structuring a presentation in the work Filling a presentation in the work with content 	-	-
Managing citations/references	<ul style="list-style-type: none"> Creation of a reference list Formatting the references 	-	-
Other activities			

4. Is there anything else you can explain and document that your independent, definable performance in creating this work/thesis would highlight or limit?

Used AI tools (ChatGPT, Claude, Perplexity, Quillbot) as a supporting tool in some phases of the work that are mentioned above. All the core research including data selection, selection of research methodology, experiment execution, analysis and interpretation of the results, drawing conclusions from the overall result, text formulation were carried out independently by myself.

5. Signature(s) of the author(s)

	Family Name, First Name	Student Number	Date	Signature
1.	Kundil, Deepthi Pradeep	22210668	19.12.2025	
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References:

- Gimpel, H., Dilger, P. (2023). Declaration of Generative AI Tool Usage in seminar papers, term papers, bachelor theses, and master theses. University of Hohenheim, May 3, 2023.
- H. von Korflesch (2023), Erklärung zur Verwendung von generativen KI-Tools - in Seminar-, Forschungs-, Bachelor- und Masterarbeiten, AG H. v. Korflesch, Universität Koblenz, 2023.

Definition of generative AI: Generative AI refers to artificial intelligence models that are designed to generate new content in the form of written text, audio, images or videos. Generative AI creates new content, including text, images, videos, code and music. Predictive AI, in turn, is used to forecast future events.