The GAIDeT package

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https://github.com/joaomlourenco/GAIDeT

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1   Introduction

`GAIDeT` is a LaTeX package providing a standardized, transparent mechanism for declaring the use of Generative Artificial Intelligence (GAI) tools in academic, technical, and professional documents.

The package is designed to support emerging ethical, institutional, and publisher requirements concerning AI-assisted content creation. It implements the *GAIDeT (Generative AI Delegation Taxonomy)*, as proposed by Suchikova et al. 2025 [1].

This package allows authors to:

- Select specific tasks delegated to AI from the predefined taxonomy (e.g., idea generation, data cleaning, text summarization).

- List the specific GAI tools used (e.g., ChatGPT, Gemini, Claude).

- Add optional explanatory comments.

- Automatically generate a formatted "Disclosure of Delegation to Generative AI" section, including the necessary responsibility statements.

2   Usage

To use the package, load it in your document preamble:

```
\usepackage{GAIDeT}
```

The declaration process consists of two steps: **Configuration** (defining what was done) and **Rendering** (printing the declaration).

2.1 Configuration

Configuration commands can be placed in the preamble or anywhere in the document body before the rendering command is called.

2.1.1 Activating Taxonomy Items

Use the `\Activate{<key>}` command to check specific items in the taxonomy. A full list of available keys is provided in Section 3.

```
% Example: Activating "Idea generation" and "Code optimization"
\Activate{c:idea}
\Activate{s:opt}
```

2.1.2 Specifying Tools

Use the `\GAItoolsUsed{<list>}` command to list the AI tools employed. The package automatically formats the output sentence based on the number of tools provided (handling singular/plural forms and commas).

```
% Example 1: No tools used
\GAItoolsUsed{}

% Example 2: One tool
\GAItoolsUsed{ChatGPT-4}

% Example 3: Multiple tools
\GAItoolsUsed{ChatGPT-4, Gemini Advanced, Claude 3}
```

2.1.3 Adding Comments

If you need to provide additional context, use the `GAIComment` environment.

```
\begin{GAIComment}
    The AI was used primarily for refining the code in Section 3,
    but the algorithm logic was derived manually.
\end{GAIComment}
```

2.1.4 Customizing the Title

You can change the default title of the declaration section using `\GAIDeTtitle`.

```
\GAIDeTtitle[Short Title]{Full Title for the Section}[section-level]
```

The last (optional) argument `section-level` defaults to `chapter` if `\chapter` is defined (e.g., in book-like documents), otherwise defaults to `section`.

2.2   Rendering the Declaration

To print the final declaration, use the `\RenderGAIDeTDeclaration` command at the desired location in your document. For papers/articles, you may consider to it before or after the references. For thesis/dissertations, please follow your University/School rules.

`\RenderGAIDeTDeclaration[<checklist_ncols>]{<Author Names>}`

- **Optional Argument** (`[<checklist_ncols>]`): The number of columns used while printing the checklist. The default is `3` columns.

- **Mandatory Argument**: A comma-separated list of author names submitting the declaration.

`\SetChecklistFont{<fontsize>}`

- **Mandatory Argument**: The font size to use while printing the checklist. The default is `\smaller[1]`, which means "*slightly smaller*".

Example:

`\RenderGAIDeTDeclaration[1]{Jane Doe, John Smith}`

prints the declaration's checkist in a single column and considers the two given authors.

3   Taxonomy Keys

The following keys correspond to the specific tasks defined in the GAIDeT taxonomy. Use these keys with the `\Activate{}` command.

Key	Description
Conceptualization	
`c:idea`	Idea generation
`c:objective`	Defining the research objective

`c:rq`	Formulating research questions and hypotheses
`c:feas`	Feasibility assessment and risk evaluation
`c:pretest`	Preliminary hypothesis testing

Literature Review

`l:search`	Literature search and systematization
`l:write`	Writing the literature review
`l:patents`	Analysis of market trends/patent environment
`l:gaps`	Novelty evaluation and gap identification

Methodology

`m:design`	Research design
`m:protocols`	Experimental or research protocols
`m:methods`	Selection of research methods

Software Development

`s:codegen`	Code generation
`s:opt`	Code optimization
`s:auto`	Process automation
`s:algs`	Algorithms for data analysis

Data Management

`d:collect`	Data collection
`d:validate`	Validation
`d:clean`	Data cleaning
`d:curate`	Data curation and organization
`d:analyze`	Data analysis
`d:viz`	Visualization
`d:repro`	Reproducibility testing

Writing and Editing

`w:textgen`	Text generation
`w:proof`	Proofreading and editing
`w:summarize`	Summarizing text
`w:concl`	Formulation of conclusions
`w:tone`	Adapting and adjusting emotional tone
`w:translate`	Translation
`w:reformat`	Reformatting
`w:press`	Press releases and outreach materials

Ethics & Supervision

`e:bias`	Bias analysis and discrimination assessment
`e:risk`	Ethical risk analysis
`e:compliance`	Compliance monitoring
`e:conf`	Data confidentiality monitoring
`sup:qa`	Quality assessment
`sup:trends`	Trend identification
`sup:limits`	Identification of limitations

sup:recs	Recommendations
sup:pub	Publication support

4 Disclosure of Delegation to Generative Artificial Inteligence

The authors declare the use of Generative AI in the research work and writing process of this document.

According to the GAIDeT taxonomy[1], the following tasks were delegated to Generative AI tools under full human supervision:

Conceptualization

- ☑ Formulating research questions and hypotheses
- ☑ Idea generation
- ☑ Defining the research objective
- ☑ Feasibility assessment and risk evaluation
- ☐ Preliminary hypothesis testing

Literature Review

- ☐ Analysis of market trends and/or patent environment
- ☑ Literature search and systematization
- ☑ Writing the literature review
- ☐ Evaluation of novelty and identification of gaps

Methodology

- ☑ Research design
- ☐ Selection of research methods
- ☐ Development of experimental or research protocols

Software Development and Automation

- ☐ Code generation
- ☐ Code optimization
- ☑ Process automation
- ☑ Creation of algorithms for data analysis

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[1]Suchikova, Y., Tsybuliak, N., Teixeira da Silva, J. A., & Nazarovets, S. (2025). GAIDeT (Generative AI Delegation Taxonomy): A taxonomy for humans to delegate tasks to generative artificial intelligence in scientific research and publishing. *Accountability in Research*, 1–27. https://doi.org/10.1080/08989621.2025.2544331

Data Management

- ☐ Data collection
- ☑ Validation
- ☐ Data cleaning
- ☑ Data curation and organization
- ☑ Data analysis
- ☐ Visualization
- ☐ Reproducibility testing

Writing and Editing

- ☑ Text generation
- ☐ Proofreading and editing
- ☑ Summarizing text
- ☐ Formulation of conclusions
- ☑ Adapting and adjusting emotional tone
- ☐ Translation
- ☐ Reformatting
- ☑ Press releases and outreach materials

Ethics Review

- ☑ Bias analysis and discrimination assessment
- ☑ Ethical risk analysis
- ☑ Monitoring compliance with ethical standards
- ☐ Data confidentiality monitoring

Supervision

- ☐ Quality assessment
- ☐ Trend identification
- ☑ Identification of limitations
- ☐ Recommendations
- ☐ Publication support

Responsibility for the final manuscript lies entirely with the authors.

Generative AI tools are not listed as authors and do not bear responsibility for the final outcomes.

Declaration submitted by: *Jane Doe*, *John Doe*, and *Mary Doe*.

Additional comment: The AI was used primarily for refining the code in Section 3, but the algorithm logic was derived manually.

References

[1] Yana Suchikova et al. "GAIDeT (Generative AI Delegation Taxonomy): A Taxonomy for Humans to Delegate Tasks to Generative Artificial Intelligence in Scientific Research and Publishing". In: *Accountability in Research* (2025), pp. 1–27. DOI: 10.1080/08989621.2025.2544331.