Documentation for the `automl` Package

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Abstract Create with `\begin{abstract} ... \end{abstract}`.

The `automl` package provides a LaTeX style for the AutoML conference. This document provides some notes regarding the package and tips for typesetting manuscripts. The package and this document is maintained at the following GitHub repository:

`https://github.com/automl-conf/LatexTemplate`

Users are encouraged to submit issues, bug reports, etc. to:

`https://github.com/automl-conf/LatexTemplate/issues`

A barebones submission is also available as `barebones_submission_template.tex` in the same repository.

1 Package Options

With no options, the `automl` package prepares an anonymized manuscript ready for submission to any track of the main conference (i.e., the methods or ABCD tracks for AutoML 2025). Several options are supported changing this behavior:

- `revealauthors` – produces a non-anonymized manuscript for single-blind submission, e.g. to the ABCD track
- `shortpaper` – produces a manuscript for submission and/or publication in the non-archival content track
- `preprint` – produces a non-anonymized manuscript for preliminary (i.e., pre-acceptance) distribution, e.g. in arXiv
- `final` – produces a non-anonymized manuscript for distribution and/or publication in the proceedings
- `hidesupplement` – hides supplementary material (following `\appendix`); for example, for submitting or distributing the main paper without supplement

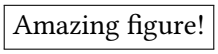
These options may be combined. For example, `final` or `shortpaper` may be used together to create a camera-ready manuscript for the non-archival content track, and `hidesupplement` can be used in combination with any other flags to hide the supplemental material.

2 Supplemental Material

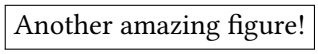
Please provide supplemental material in the main document. You may begin the supplemental material using `\appendix`. Any content following this command will be suppressed in the final output if the `hidesupplement` option is given.

Table 1: An example table using the booktabs package.

	metric	
method	accuracy	time
baseline	10	100
our method	**100**	**10**



(a) Subfigure caption.



(b) Another subfigure caption.

Figure 1: An example figure with subfigures. (a): an amazing figure. (b): another amazing figure.

3 Note Regarding Line Numbering at Submission Time

To ensure that line numbering works correctly with display math mode, please do *not* use TEX primitives such as `$$` and `eqnarray`. (Using these is not good practice anyway.)[1][2] Please use LATEX equivalents such as `\[ ... \]` (or `\begin{equation} ... \end{equation}`) and the `align` environment from the `amsmath` package.[3]

4 References

Authors may use any citation style as long as it is consistent throughout the document. By default we propose author–year citations. Code is provided in the preamble to achieve such citations using either `natbib/bibtex` or the more modern `biblatex/biber`.

You may create a parenthetical reference with `\citep`, such as appears at the end of this sentence (Author, 2000). You may create a textual reference using `\citet`, as Author (2000) also demonstrated.

5 Tables

We recommend the `booktabs` package for creating tables, as demonstrated in Table 1.

Table captions should appear *above* tables.

6 Figures and Subfigures

The `automl` style loads the `subcaption` package, which may be used to create and caption subfigures. Please note that this is *incompatible* with the (obsolete and deprecated) `subfigure` package. A figure with subfigures is demonstrated in Figure 1.

Figure captions should appear *below* figures.

Please ensure that all text appearing in figures (axis labels, legends, etc.) is legible.

7 Pseudocode

To add pseudocode, you may make use of any package you see fit – the `automl` package should be compatible with any of them. In particular, you may want to check out the `algorithm2e`[4] and/or the `algorithmicx`[5] packages, both of which can produce nicely typeset pseudocode. You may also wish to load the `algorithm`[6] package, which creates an `algorithm` floating environment you can

[1] `https://tex.stackexchange.com/questions/196/eqnarray-vs-align`

[2] `https://tex.stackexchange.com/questions/503/why-is-preferable-to`

[3] `http://tug.ctan.org/info/short-math-guide/short-math-guide.pdf`

[4] `https://ctan.org/pkg/algorithm2e`

[5] `https://ctan.org/pkg/algorithmicx`

[6] `https://ctan.org/pkg/algorithms`

access with `\begin{algorithm} ... \end{algorithm}`. This environment supports `\caption{}`, `\label{}` and `\ref{}`, etc.

8 Adding Acknowledgments

You may add acknowledgments of funding, etc. using the `acknowledgments` environment. Acknowledgments will be automatically commented out in anonymized manuscripts (that is, if the `final` or `preprint` options are not given). An example is given below in the source code for this document; it will be hidden in the PDF unless the `final` option is given.

Acknowledgements. The authors have many people to thank! This material will be automatically hidden for submissions, e.g., if the `final` or `preprint` options are not given.

References

Author, A. (2000). *The Definitive Resource.* Universal Press.

9 [Optional] Submission Checklist

All submissions are welcome to include the AutoML submission checklist provided below. **While not required, including the checklist may be beneficial during the reproducibility review process and for maximizing long-term impact.** If you choose to include the checklist, it will not count towards the page limit. The submission checklist draws upon related submission checklists: the NeurIPS '22 checklist and the NAS checklist.

For each question, change the default `\answerTODO{}` (typeset [TODO]) to `\answerYes{[justification]}` (typeset [Yes]), `\answerNo{[justification]}` (typeset [No]), or `\answerNA{[justification]}` (typeset [N/A]). We recommend including a brief justification to your answer, either by referencing the appropriate section of your paper or providing a brief inline description. For example:

- Did you include the license of the code and datasets? [Yes] See Section 7.
- Did you include all the code for running experiments? [No] We include the code we wrote for conducting the experiments, but complete replication depends on proprietary libraries for executing on a private compute cluster. The code therefore is not runnable without modification. To compensate, we provide a runnable but non-parallelized version of the code that could replicate the results at the expense of a greater wall-clock time.
- Did you include the license of the datasets? [N/A] Our experiments were conducted on publicly available datasets and we have not introduced new datasets.

Please note that if you answer a question with `\answerNo{}`, we recommend providing an explanation and/or compensation for the omission. For example, if you cannot provide complete evaluation code for some reason, you might instead provide code for a minimal reproduction of the main insights of your paper.

Please do not modify the questions and only use the provided macros for your answers. Note that the submission checklist does not count towards the page limit. If you choose to modify `instructions.tex`, please delete these instructions and only keep the Submission Checklist section heading above along with the questions/answers below.

1. For all authors...
   (a) Do the main claims made in the abstract and introduction accurately reflect the paper's contributions and scope? [TODO]
   (b) Did you describe the limitations of your work? [TODO]
   (c) Did you discuss any potential negative societal impacts of your work? [TODO]
   (d) Did you read the ethics review guidelines and ensure that your paper conforms to them? (see `https://2022.automl.cc/ethics-accessibility/`) [TODO]
2. If you ran experiments...
   (a) Did you use the same evaluation protocol for all methods being compared (e.g., same benchmarks, data (sub)sets, available resources, etc.)? [TODO]
   (b) Did you specify all the necessary details of your evaluation (e.g., data splits, pre-processing, search spaces, hyperparameter tuning details and results, etc.)? [TODO]
   (c) Did you repeat your experiments (e.g., across multiple random seeds or splits) to account for the impact of randomness in your methods or data? [TODO]

(d) Did you report the uncertainty of your results (e.g., the standard error across random seeds or splits)? [TODO]

(e) Did you report the statistical significance of your results? [TODO]

(f) Did you use enough repetitions, datasets, and/or benchmarks to support your claims? [TODO]

(g) Did you compare performance over time and describe how you selected the maximum runtime? [TODO]

(h) Did you include the total amount of compute and the type of resources used (e.g., type of GPUs, internal cluster, or cloud provider)? [TODO]

(i) Did you run ablation studies to assess the impact of different components of your approach? [TODO]

3. With respect to the code used to obtain your results…

(a) Did you include the code, data, and instructions needed to reproduce the main experimental results, including all dependencies (e.g., `requirements.txt` with explicit versions), random seeds, an instructive `README` with installation instructions, and execution commands (either in the supplemental material or as a URL)? [TODO]

(b) Did you include a minimal example to replicate results on a small subset of the experiments or on toy data? [TODO]

(c) Did you ensure sufficient code quality and documentation so that someone else can execute and understand your code? [TODO]

(d) Did you include the raw results of running your experiments with the given code, data, and instructions? [TODO]

(e) Did you include the code, additional data, and instructions needed to generate the figures and tables in your paper based on the raw results? [TODO]

4. If you used existing assets (e.g., code, data, models)…

(a) Did you cite the creators of used assets? [TODO]

(b) Did you discuss whether and how consent was obtained from people whose data you're using/curating if the license requires it? [TODO]

(c) Did you discuss whether the data you are using/curating contains personally identifiable information or offensive content? [TODO]

5. If you created/released new assets (e.g., code, data, models)…

(a) Did you mention the license of the new assets (e.g., as part of your code submission)? [TODO]

(b) Did you include the new assets either in the supplemental material or as a URL (to, e.g., GitHub or Hugging Face)? [TODO]

6. If you used crowdsourcing or conducted research with human subjects…

(a) Did you include the full text of instructions given to participants and screenshots, if applicable? [TODO]

(b) Did you describe any potential participant risks, with links to institutional review board (IRB) approvals, if applicable? [TODO]

(c) Did you include the estimated hourly wage paid to participants and the total amount spent on participant compensation? [TODO]

7. If you included theoretical results…

(a) Did you state the full set of assumptions of all theoretical results? [TODO]

(b) Did you include complete proofs of all theoretical results? [TODO]

A Proof of Theorem 1

This material will be hidden if the `hidesupplement` option is provided.