

Research experiment worksheet

Define the question, then record actual evidence. Blank or unchecked items mean the review is incomplete. This worksheet does not certify an experiment.

Project or task:

Plan version / date:

01 Define the research question

Testable hypothesis / prediction target:

Primary metric, units and preferred direction:

A result that would contradict the hypothesis:

02 Record before running

Review item	Record or evidence location
Data and split	Source, version, permissions and train / validation / test split
Fair comparison	Baselines, preprocessing, tuning rules and comparison conditions
Run environment	Code version, dependencies, hardware and random seeds
Budget and stopping	Number of runs, compute budget and stopping rule

03 Check after running

- ☐ Keep executed configurations, logs and evaluation outputs.
- ☐ Check whether test data influenced model selection or fitted preprocessing.
- ☐ Record individual runs and variation, not just the best score.
- ☐ Preserve failed, incomplete and non-supporting results.

From results to manuscript evidence

Complete one row for each claim intended for the manuscript. Separate planned comparisons from completed, verified work. Do not fill missing experiments with estimated scores.

One claim per row. Suggested status: to check / verified / not supported.

Claim / reported value	Run and evidence location	Conditions / limitations	Review status

04 Check before writing

- ☐ Numbers, units and data splits match the actual evaluation artifacts.
- ☐ Source values, plot axes and captions agree with one another.
- ☐ References can be located and support the associated statements.
- ☐ Comparison rules, repetitions and unfinished work are reported accurately.

05 Open questions and next steps

About AutoResearch

AutoResearch connects research ideas, AI modeling, GPU experiments, figures and manuscript drafts in Chinese and English. Private-beta access requires approval. Approved members receive 5,000 limited starter credits; future pricing is not announced.

Use this worksheet independently, without registration. Researchers must verify scientific claims. The product does not guarantee positive findings or publication acceptance.

Technical references

scikit-learn: data leakage and preprocessing
PyTorch: reproducibility and environment limits



Product and public guides