

The Structure of Academic Paper



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Today we are going to talk about...

- 1 Where to find papers
- 2 The structure of a paper

Where to download statistical papers

- **Google Scholar:** <http://scholar.google.com>
Papers with free are marked with **[PDF]** link to the right.
- **Working papers with free access:**
 - **Social Science Research Network:** <http://www.ssrn.com>
 - **Research Papers in Economics:** <http://repec.org>
 - **e-Print archive:** <http://arxiv.org>

The basic structure of a statistical paper

- Title
- Authors and affiliations
- Abstract and Keywords
- Introduction
- The Model/Methodology Section
- Inference Section
- Simulations/Applications
- Discussion and concluding remarks
- References
- Appendix

The introduction section

- Background
 - Historical/Application background
 - Introduce necessary terminologies to make your paper **self-contained**.
- Literature reviews
 - What has/hasn't been done in this topic by referencing to related research papers?
 - How important of this top?
 - Slightly mention your idea. This will make people interested to continuous to read.
- Notes: You have write this section very carefully.
 - Stat your opinion logically.
 - Cite the right references.

The methodology section

- Use a subsection to describe the model/method.
- The notations should follow the convention.
 - e.g. $N(\mu, \sigma^2)$ for standard normal.
 - Vector, Matrix, Lower cases, Upper cases, Greek letters.
 - Avoid clashed notations (same notation for two purposes) throughout the whole paper.

The inference section

- How to estimate the model?
- How to interpret the model?
- How to predict the model?
- How to perform model comparison/evaluation?
- Are there any competing models available?

Simulations

- Simulation setup
 - Motivate your simulations. Why and what kind of achievement do you expect?
 - Describe clearly so other people can replicate your study.
- Run the simulation (before you write down it) and summarize the results.
 - Is that result as good as expected? If not, why?
- Think about this example: Check if the regression coefficients are biased via OLS in linear regression.

Applications

- Describe the data background.
- Summarize the results by applying your model.
- Comparison with the competing models.
- Prediction.

Acknowledgement

- Show your gratitude to whom helped you in this research, supervisor, referees.
- If this paper belongs to a grant/project. You need to state that accordingly.

Appendix

- Only important details that are too long to be included in the main contents.
- Never attach computer code here.

References

- Most journals prefer author-year type references.
- Never include any item that is not cited in the main text.
- LaTeX with BibTeX solves this.