

# Writing AI Conference Papers: A Beginner's Guide

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# Introduction

- Challenge: How to successfully write and submit an AI conference paper?
- Goal: Provide practical steps for beginners to navigate paper writing.



<https://github.com/hzwer/WritingAIPaper?tab=readme-ov-file>

# Paper Structure

- Key Sections:
  - Abstract
  - Introduction
  - **Main body (Related work, Methodology, Experiments)**
  - Discussion and Conclusion
- Tip: Start with the main body, refine the introduction last.

# Finding the Core Idea

- Three Key Contributions:
  - **Insight:** *you have an explanation for something that is already there.*
  - **Performance:** *you can do something better.*
  - **Capability:** *you can do something that could not be done before.*
- Tip: Focus on one strong core idea and emphasize its novelty.

# Constructing the Framework

- Consider your Audience:
  - Present the valuable insights early on.
  - Avoid overly complex descriptions of research methods.
- Tip: Consider the target audience, introduce the valuable findings rather than the tortuous research process.

# Solidifying Results

- Key Aspects:
  - Show results that clearly align with your contributions.
  - Use tables and visuals to highlight important findings.
- Tip: Be objective and avoid over-claiming.

# Writing the Introduction

- Three Moves:
  - Establish the importance of your research area.
  - Find the gap or niche in existing research.
  - Show how your paper fills that gap with a clear outline.
- Tip: Be concise and avoid unnecessary details.

# Improving Readability

- Enhance Logical Strength: Avoid misusing connectives.
  - “We argue that problem A is critical. To this end, we propose method B.”
  - "To this end" refers to which end? In fact, the previous context only presents a viewpoint without specifying any actions or goals, so the use of this connective is inherently incorrect.
- Defensibility: Use references and avoid exaggeration.
- Minimize Confusion: Explain concepts clearly and promptly.
- Increase Information Density: Get to the point quickly.



# Practical Tips

- Final Checklist:
  - Ensure charts and text are consistent.
  - Use topic sentences for clarity.
  - Place explanations near visuals.
- Tip: Always review your work with fresh eyes.

**Good Luck!**