**1. Title**

* **Purpose:** Concise, specific, and informative; grabs attention and summarizes the study.
* **Characteristics:** Should reflect the main contribution, avoid jargon, and, if possible, hint at the methodology or scope.

**2. Abstract**

* **Purpose:** A brief summary of the entire paper.
* **Typical content (150–300 words):**
  1. Background/problem statement:  
       
     Most of the coding assistants are in the two extreme ends either they are complete code coding tools (only fast prototyping with garbage code) or they are snippet generators like a very basic autocorrect. They are not aware of your initial context (what you really wanna build, is it for learning or production or scalable prototyping and they) don't tell you or suggest you any changes based on the context. And also when you change a coding file or add a feature the A.I rewrites that file rather than it should rather change the function or the line that is necessary and commit the change.
  2. Research objective or hypothesis
  3. Methods or approach
  4. Key results/findings
  5. Implications or significance
* **Tip:** It should be standalone; a reader should understand the core contribution without reading the full paper.

**3. Keywords**

* 3–6 relevant words or phrases that make your paper discoverable in searches.

**4. Introduction**

* **Purpose:** Set the stage for your research.
* **Typical structure:**
  1. **Context:** Explain the broader problem area.
  2. **Gap:** What is missing or unresolved in existing research.
  3. **Motivation:** Why this problem matters (real-world impact or theoretical importance).
  4. **Research questions/objectives:** Clear statements of what you aim to achieve.
  5. **Contribution:** What’s new, original, or unique about your work.
  6. **Outline:** Optional, briefly describe how the paper is structured.

**5. Literature Review / Related Work**

* **Purpose:** Situate your research within existing knowledge.
* **Typical content:**
  1. Summarize key studies relevant to your problem.
  2. Compare approaches, highlight limitations or gaps.
  3. Position your study in context (how it improves or differs).
* **Tip:** Use this to justify the novelty of your research.

**6. Methodology / Materials and Methods**

* **Purpose:** Describe how the research was conducted so others can replicate it.
* **Content varies by field but generally includes:**
  1. Research design (experimental, survey, simulation, computational model, etc.)
  2. Data sources (datasets, instruments, participants)
  3. Procedures or protocols
  4. Tools, software, or frameworks used
  5. Algorithms, models, or theoretical frameworks (if applicable)
  6. Analysis methods (statistical tests, evaluation metrics, etc.)
* **Tip:** Transparency is key—another researcher should be able to reproduce your results.

**7. Results / Findings**

* **Purpose:** Present the outcome of your research objectively.
* **Content:**
  1. Tables, graphs, or charts summarizing key data.
  2. Observations, measurements, or outputs.
  3. Patterns, correlations, or anomalies identified.
* **Tip:** Avoid interpretation here; focus on presenting the facts clearly.

**8. Discussion**

* **Purpose:** Interpret your results and connect them to your research questions.
* **Content:**
  1. Explain what the results mean.
  2. Compare findings to prior research.
  3. Discuss implications for theory, practice, or future research.
  4. Address limitations (sample size, assumptions, biases).
* **Tip:** This is where your critical thinking shines; show understanding of your field.

**9. Conclusion**

* **Purpose:** Wrap up the research succinctly.
* **Content:**
  1. Restate main findings.
  2. Highlight contributions.
  3. Suggest practical applications or recommendations.
  4. Point to future research directions.
* **Tip:** Keep it concise—avoid introducing entirely new information.

**10. References / Bibliography**

* **Purpose:** Credit all sources used.
* **Tips:**
  + Use a consistent citation style (APA, IEEE, ACM, etc.).
  + Include only relevant and credible sources.
  + Ensure all in-text citations appear in the reference list.

**11. Optional Sections**

Depending on the journal/conference and field:

* **Acknowledgments:** Funding sources, advisors, or contributors.
* **Appendices:** Additional datasets, proofs, questionnaires, or code snippets.
* **Supplementary Material:** Extra figures, videos, or extended data.