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Your main task is to extract the novel main findings of the paper. Each "claim" should be concise
and may be broken down if necessary. Avoid using determiners, and present the claims as generic
statements that are searchable. Imagine you are going to cite these claims in your paper, so ensure
they are clear, concise, and highlight the main findings.

IMPORTANT: Note that a claim is described in the following ways:

- A statement that declares something is better;
- A statement that proposes something new;
- A statement that describes a new finding or a new cause-effect relationship.


1. Novelty Claims

   - Definition:Claims that introduce something new or original, such as a new theory, algorithm,
model, or approach.
   - Examples:
     - Proposing a new algorithm for data compression.
     - Introducing a novel framework for distributed computing.
   Validation: Often validated through theoretical proofs or by demonstrating that the new
contribution is different from and improves upon existing work.

2. Performance Claims

   - Definition: Claims that focus on the efficiency, speed, accuracy, or scalability of a method,
system, or algorithm.
   - Examples:
     - Demonstrating that an algorithm runs faster than existing alternatives.
     - Showing that a model achieves higher accuracy on benchmark datasets.
  Validation: Supported by empirical results, benchmarks, or performance comparisons.

3. Applicability Claims

   - Definition:Claims that emphasize the practical use, relevance, or impact of the research in
real-world scenarios or specific domains.
   - Examples:
     - Asserting that a security protocol is effective for IoT devices.
     - Demonstrating that a machine learning model can be applied to healthcare diagnostics.
   Validation:Validated through case studies, domain-specific applications, or practical
implementations.

4. Background Claims

   - Definition: Claims that are imported from previous work or existing literature to provide
context, justification, or support for the current study. These claims are often found in the
related work section or when framing the problem.
   - Examples:
     - Referencing a well-known algorithm to explain the foundation of the current approach.
     - Citing previous studies to justify the need for new research in a particular area.
     - Discussing existing theories or models that the current study builds upon or challenges.
  Validation: Typically validated by citing credible sources, existing literature, or previous
research findings.


Please extract the claims from the provided paper's content and present them in the following JSON
format:

[
  {
    "claim": "...",           // The core finding; self-contained, atomic, verifiable
    "section_name": "...",    // Section name from which the claim was extracted
    "context": "...",         // Brief context or explanation for the claim
    "theme": "..."            // The category of the claim: 'Novelty', 'Performance',
'Applicability', or 'Background'
  },..
]

Notes:

- Do not assign "content" as the section name. Find the actual section name from the paper.
- The "theme" field should be one of the following values: 'Novelty', 'Performance',
'Applicability', or 'Background', corresponding to the claim categories defined above.
- Ensure that each claim is clear and understandable on its own.
- DO NOT generate more than 15 claims, but feel free to generate fewer!
```

Figure 5: Claim extraction instructions for the unsupervised pipeline

The following citation sentences are extracted from research papers in Computer Science. You are tasked with assessing the quality of the conclusion of each citation sentence.

A good quality citance usually contains one of the following:

- A statement that declares something is better;
- A statement that proposes something new;
- A statement that describes a new finding or a new cause-effect relationship.

Figure 6: Rubric instruction for citances

For each claim provided, evaluate how accurately each citance (citation sentences in other papers) represents the claim by assigning a degree of match (0-10).

For each citance provided (citation sentences in other papers), evaluate how accurately each claim represents the citance by assigning a degree of match (0-10).

Figure 7: Instructions for matching claims and citances

The main section names for computer science papers typically follow a common structure used in academic writing. While specific names and the number of sections can vary depending on the journal, conference, or format, these are the main sections commonly found in computer science papers:

Abstract - A concise summary of the research paper, highlighting the problem, methods, and results.

Introduction - Provides background information, introduces the research problem, and outlines the paper's objectives and contributions.

Background- Summarizes prior research or work that is relevant to the paper's topic and situates the current work within the existing literature.

Methods - Describes the techniques, algorithms, frameworks, or approaches used to conduct the research or solve the problem.

Results - Presents the findings of the research, including data analysis, experiment results, or theoretical proof.

Discussion - Interprets the results, discussing their significance, implications, and limitations.

Conclusion - Summarizes the paper's key points and contributions and suggests directions for future research.

Here are the current section names I have, and I want to create a dictionary mapping each section name to one of these seven categories.

Figure 8: Instructions for section mapping