INSTRUCTIONS TO REFEREES

For a contribution to be acceptable for publication in a journal, it must comprise novel material not previously published in a technical journal. The novelty will usually lie in original results, methods, observations, concepts, or applications, but may also reside in syntheses of/or new insights into previously reported research. In a regular paper, the title, abstract, introduction, and summary should be sufficiently informative to make the contributions of the paper clear to the broadest possible audience, and to place them in context with the related work.

In addition to these fundamental requirements, acceptance for publication depends on a number of important criteria relating to reader interest, technical content, and presentation. To assist the referee in addressing these criteria, the Review form includes a short answer OVERVIEW (Section III) as well as an open form for DETAILED COMMENTS (Section IV). The principal intent of the Overview is to raise the kind of questions that should be addressed in assessing the paper. In other words, the Overview provides a list of the criteria referred to above and, in this sense, serves as a part of these instructions. In addition, the short answers to these questions provide a uniform synopsis of the review for both the editor and the author(s).

The essential part of the evaluation, however, is the information contained in the reviewer's Detailed Comments (Section IV). Please try to provide one or more pages of comments in this section. At minimum, please provide one half-page of comments. It is hoped that these comments will be guided by the responses indicated in the Overview, with emphasis placed on points that substantiate the recommendation to the editor. A recommendation to accept for publication, whether with no changes or with minor revisions, should be reserved for manuscripts that describe novel work and satisfy the readership, content, and presentation criteria indicated in the Overview.

If major revisions are recommended, the referee should point these out as specifically as possible and should differentiate changes regarded as optional from those judged as mandatory. If the revisions required are extensive, it is perhaps best to reject the paper and recommend preparation of a "new", heavily revised manuscript for resubmission to the journal. If a paper is rejected mainly on the basis of reader interest, the reviewer may wish to recommend submission to a more appropriate journal or conference. Papers with little or no salvageable material should be rejected outright and discouraged from later submission.

ABOUT THE JOURNAL:

This journal's ambition is to stimulate the exchange of ideas and interaction between these two related fields of interest: Data Engineering and Knowledge Engineering. The journal reaches a world-wide audience of researchers, designers, managers and users. The major aim of the journal is to identify, investigate and analyze the underlying principles in the design and effective use of these systems. The journal achieves this aim by publishing original research results, technical advances and news items concerning data engineering, knowledge engineering, and the interface of these two fields.

The journal covers the following topics:

1. Representation and Manipulation of Data & Knowledge: Conceptual data models. Knowledge representation techniques. Data/knowledge manipulation languages and techniques.
2. Architectures of database, expert, or knowledge-based systems: New architectures for database / knowledge base / expert systems, design and implementation techniques, languages and user interfaces, distributed architectures.
3. Construction of data/knowledge bases: Data / knowledge base design methodologies and tools, data/knowledge acquisition methods, integrity/security/maintenance issues.
4. Applications, case studies, and management issues: Data administration issues, knowledge engineering practice, office and engineering applications.
5. Tools for specifying and developing Data and Knowledge Bases using tools based on Linguistics or Human Machine Interface principles.

I. SUMMARY AND RECOMMENDATION (TO BE WITHHELD FROM AUTHOR)

Summary of Evaluation
     [] Excellent
     [] Good
     [] Fair
     [] Poor

Recommendation
     [] Accept without changes
     [] Accept if certain minor changes are made (see Section IV)
     [] Author should prepare a major revision (see Section IV) for another round
       of review
     [] Reject

If the paper is rejected, the author(s) should
     [] Prepare a major revision and resubmit it as a new paper
     [] Submit it to another journal or conference
     [] Regard it as not publishable

Contribution: (Please put marks in all columns!)

THEORY	APPLICATIONS		OVERALL QUALITY	
		Significant		Excellent
		Tutorial		Good
		Possible		Fair
		Minor		Poor
		None		

II. COMMENTS TO BE WITHHELD FROM AUTHOR

III. OVERVIEW

A) Reader Interest

1. Is the paper of current interest to a reasonable segment of JOURNAL readership?
     [] Yes
     [] Perhaps
     [] No

2. Relative to the current level of reader interest in the paper, how is this interest likely to change during the next five years?
     [] Growing interest
     [] Relatively little change
     [] Diminishing interest

3. Within its particular field of specialization, is the topic of the paper considered important?
     [] Yes, definitely
     [] Moderately so
     [] Not really

B) Content

1. Is the paper technically sound?
     [] Yes
     [] Appears to be, but didn't check completely
     [] Only partially
     [] No

2. How would you describe the technical depth of the paper?
     [] Expert level
     [] Appropriate for someone working in the field
     [] Suitable for the non-specialist
     [] Superficial

3. Does the paper make a tangible contribution to the state-of-the-art in it's field?
     [] Yes, definitely
     [] To a limited extent
     [] No

4. Is the bibliography adequate?
     [] Yes
     [] Yes, after certain additions and/or deletions are made (see Section IV)
     [] No

5. To what extent is material in the paper likely to be used by other researchers and practitioners?
     [] Large
     [] Average
     [] Small

C) Presentation

1. Is the abstract an appropriate digest of the work presented?
     [] Yes
     [] No

2. Does the introduction clearly state the background and motivation in terms understandable to the nonspecialist?
     [] Yes
     [] Probably
     [] No

3. How would you rate the overall organization of the paper?
     [] Satisfactory
     [] Could be improved
     [] Poor

4. Relative to its technical content, is the length of the paper appropriate?
     [] Yes
     [] No, it should be lengthened
     [] No, it should be shortened

5. Is the English satisfactory?
     [] Yes
     [] No

6. How readable is the paper for a computer scientist or engineer who is not a specialist in this particular field?
        [] Readable with ordinary effort
        [] Paper is self-contained, but a considerable effort is required
        [] If the definitions of certain concepts, terms, and symbols were included
            (noted by "define" in the margins), readability would be improved
        [] Less than half the paper is readable
        [] Unreadable

7. Disregarding technical content, how would you rate the quality of this presentation?
        [] Excellent
        [] Good
        [] Fair
        [] Poor

IV. DETAILED COMMENTS (TO BE RETURNED TO AUTHORS) (Please try to provide one or more pages of comments in this section. At minimum, please provide one half-page of comments. THIS SECTION MUST BE SUBMITTED ELECTRONICALLY ONE HOUR BEFORE THE DEADLINE, THE EMAIL NEEDS TO BE SENT TO **ANGRYK@CS.MONTANA.EDU**)

• Identify your view of the major contributions (or potential thereof) of the paper.

• Specify the major reason(s) for acceptance/resubmit/reject.

• Itemize specific revisions needed/suggested.