



**ABSTRAC
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WRITING**

Sample 1

This paper explores privacy issues in relation to the growing prominence of marketing research and data mining in websites for children. Whereas increasing protection is given to individuals' personal information, little attention is paid to information that is aggregated, electronically scanned, and sorted — despite the fact that aggregate information is often highly valued by the marketing industry. The authors review current trends in Internet market research, data mining techniques, policy initiatives, and the contents of some of the most highly frequented children's game sites. The paper demonstrates how common data mining practices constitute a threat to children's emerging rights online.

Sample 2

Human-robot collaborative work has the potential to advance quality, efficiency and safety in manufacturing. In this paper we present a gestural communication lexicon for human-robot collaboration in industrial assembly tasks and establish methodology for producing such a lexicon. Our user experiments are grounded in a study of industry needs, providing potential real-world applicability to our results. Actions required for industrial assembly tasks are abstracted into three classes: part acquisition, part manipulation, and part operations. We analyzed the communication between human pairs performing these subtasks and derived a set of communication terms and gestures. We found that participant-provided gestures are intuitive and well suited to robotic implementation, but that interpretation is highly dependent on task context. We then implemented these gestures on a robot arm in a human-robot interaction context, and found the gestures to be easily interpreted by observers. We found that observation of human-human interaction can be effective in determining *what* should be communicated in a given human-robot task, *how* communication gestures should be executed, and priorities for robotic system implementation based on frequency of use.

What is an Abstract?

- ❑ An abstract is a self-contained, short, and powerful statement that describes a larger work.
- ❑ An **abstract** is a brief summary of a research article, thesis, review, conference proceeding, or any in-depth analysis of a particular subject and is often used to help the reader quickly ascertain the paper's purpose

Standard Word Limit

100 to 250 words

Informative Abstract Format (For Completed Study)

1) Motivation:

Why do we care about the problem and the results? If the problem isn't obviously "interesting" it might be better to put motivation first; but if your work is incremental progress on a problem that is widely recognized as important, then it is probably better to put the problem statement first to indicate which piece of the larger problem you are breaking off to work on. This section should include the importance of your work, the difficulty of the area, and the impact it might have if successful.

2) Problem statement:

What *problem* are you trying to solve? What is the *scope* of your work (a generalized approach, or for a specific situation)? Be careful not to use too much jargon. In some cases it is appropriate to put the problem statement before the motivation, but usually this only works if most readers already understand why the problem is important.

3) Approach:

How did you go about solving or making progress on the problem? Did you use simulation, analytic models, prototype construction, or analysis of field data for an actual product? What was the *extent* of your work (did you look at one application program or a hundred programs in twenty different programming languages?) What important *variables* did you control, ignore, or measure?

4) Results:

What's the answer? Specifically, most good computer architecture papers conclude that something is so many percent faster, cheaper, smaller, or otherwise better than something else. Put the result there, in numbers. Avoid vague, hand-waving results such as "very", "small", or "significant." If you must be vague, you are only given license to do so when you can talk about orders-of-magnitude improvement. There is a tension here in that you should not provide numbers that can be easily misinterpreted, but on the other hand you don't have room for all the caveats.

5) Conclusions:

What are the implications of your answer? Is it going to change the world (unlikely), be a significant "win", be a nice hack, or simply serve as a road sign indicating that this path is a waste of time (all of the previous results are useful). Are your results *general*, potentially generalizable, or specific to a particular case?

Abstract as whole...



Motivation

Problem
statement

Methodology

Results and
conclusion

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