

# My Insanely Great HCI Summer Paper

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May 19, 2005

## **Abstract**

Describe your paper in 100-200 words, give or take. The command-line `wc` utility is really useful here!

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# 1 Outline for Survey Paper

The following subsections form the outline for a survey paper — essentially “read up on something, then report on what you read.” In the final paper, these subsections should actually be promoted to full sections, and this artificial umbrella section should be removed.

This type of paper is likely to be the heaviest user of L<sup>A</sup>T<sub>E</sub>X’s excellent bibliography features. Citations and references are handled automatically by L<sup>A</sup>T<sub>E</sub>X through its companion program, B<sub>I</sub>B<sub>T</sub>E<sub>X</sub>. All you have to do is provide a bibliography file that provides the reference information and internal keys (very much like variable names) that you use in your document.

B<sub>I</sub>B<sub>T</sub>E<sub>X</sub> supports virtually all kinds of references, including books [SP05, Nie93, Nor02], articles [RSW05, HHTR05], and conference proceedings [CSW05, TBSR04], to name a few.

## 1.1 Introduction

Provide an introductory description of the HCI project or body of work that you are summarizing or surveying in this paper. Discuss any goals, motivation, or examples of the subject; the key is to provide the user with any information that is necessary to understand the project or work. This descriptive section should also allow the user to understand the subsequent detail sections on the subject.

## 1.2 Background, Preliminary, and Related Work

Describe any history, work, or projects that serve as direct predecessors to the subject that you are summarizing or surveying. These items typically form the context or environment that spawned the subject of your paper. Previous work that has since been replaced or supplanted by the subject of your paper belongs in the section as well.

## 1.3 Current Status and Discussion

Provide the most up-to-date status report on the subject of your paper — what it can do, its level of maturity, any current applications, any related work, the latest findings or observations — complete with citations to the sources that provided this information. A key component of this section will be any references to the most recent publications, documents, or version of your paper’s subject.

Another key component of this section is an evaluation of the subject: successes, failures, problems solved, and problems discovered. This component serves as an excellent transition to the final major section, which is...

## 1.4 Future Directions

Summarize what authors or developers have said about the future direction of your paper’s subject. What’s next? What new features are

planned? What technical challenges or other barriers lie ahead?

## 1.5 Conclusion

Wrap up your survey with an “executive summary” of the paper’s subject, its background, its current status, and its future directions.

## 2 Outline for Analysis Paper

The following subsections form the outline for an analysis paper — or, “read about something, then evaluate it” using the techniques, theory, and metrics discussed in class. In the final paper, these subsections should actually be promoted to full sections, and this artificial umbrella section should be removed.

### 2.1 Introduction

Summarize the system that you are analyzing and evaluating, as well as the techniques or methods that you specifically use to perform this analysis.

### 2.2 Previous Work

Provide background work or prior versions (or equivalents) of the system being analyzed. For this type of paper, most of your citations and references will reside here. Refer to the first few paragraphs in Section 1 for pointers on creating effective bibliographies and citations with `BIBTEX` and `LATEX`.

### 2.3 Heuristic Evaluation

Assess the system using a subset of the “golden rules,” guidelines, first principles, or what-have-you from the course material. Support your evaluation with screenshots, scenarios, or specific issues with the system.

### 2.4 Quantitative Evaluation

Describe how you would evaluate this system using the five usability metrics of learnability, efficiency, memorability, errors, and satisfaction. Include a hypothesis or forecast of how you think the system will fare (e.g. “The system might not perform very well with regard to efficiency because very few keyboard shortcuts are provided.”).

### 2.5 Conclusion

Summarize your final analysis and evaluation of the system in question. List its potential strengths and weaknesses. Provide suggestions for addressing the weaknesses that you found with the system’s design.

## 3 Outline for Specification Paper

The following subsections form the outline for a specification paper — or, “make something up” while consciously following the techniques, theory, and metrics discussed in class. In the final paper, these subsections should actually be promoted to full sections, and this artificial umbrella section should be removed.

This type of paper will likely be the heaviest user of diagrams, sample screens, and other visual aids. Don’t hesitate to consult me if you get stuck with trying to create and include these diagrams using L<sup>A</sup>T<sub>E</sub>X.

### 3.1 Introduction

Summarize the system for which you have designed and specified a user interface. Briefly describe what the system does and what its goals are.

### 3.2 Background and Motivation

Cite any previous work that is relevant to the system and the interaction design approach(es) that you have chosen. Such work includes but is not limited to background information, pre-existing similar systems, or papers on the interaction design techniques that you used. As with the analysis paper, this section is likely the heaviest user of bibliographic features of L<sup>A</sup>T<sub>E</sub>X and B<sub>I</sub>B<sub>T</sub>E<sub>X</sub>.

### 3.3 System Description

Describe the system in detail in this section. Use the vocabulary, terms, models, or theory used in class when discussing the objects, tasks, or requirements for the system.

### 3.4 Interaction Design and Discussion

Describe the interaction architecture that you have designed for this system. Provide both heuristic and quantitative justifications or explanations for your design choices. In many respects, this section is the converse of an analysis and evaluation paper — you are trying to communicate your design and its benefits to the reader using HCI theory, guidelines, and principles.

### 3.5 Conclusion

Summarize the system and the user interface that you have designed for it. For this type of paper, provide a brief roadmap of “what’s next” — implementation tasks, unsolved problems, or any other activity that builds on the work that you have already done.

## References

- [CSW05] Andy Cockburn, Joshua Savage, and Andrew Wallace. Tuning and testing scrolling interfaces that automatically zoom. In *CHI '05: Proceeding of the SIGCHI conference on Human factors in computing systems*, pages 71–80, New York, NY, USA, 2005. ACM Press.
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- [Nie93] Jakob Nielsen. *Usability Engineering*. Academic Press, 1993.
- [Nor02] Donald A. Norman. *The Design of Everyday Things*. Basic Books, 2002.
- [RSW05] Daniel M. Russell, Norbert A. Streitz, and Terry Winograd. Building disappearing computers. *Commun. ACM*, 48(3):42–48, March 2005.
- [SP05] Ben Shneiderman and Catherine Plaisant. *Designing the User Interface: Strategies for Effective Human-Computer Interaction*. Addison Wesley, 4th edition, 2005.
- [TBSR04] Steve Tsang, Ravin Balakrishnan, Karan Singh, and Abhishek Ranjan. A suggestive interface for image guided 3d sketching. In *CHI '04: Proceedings of the SIGCHI conference on Human factors in computing systems*, pages 591–598, New York, NY, USA, 2004. ACM Press.