

ANATOMY OF AN ABSTRACT

INFO 490 Informatics Capstone

Winter 2009

Due Dates:

300-word Abstract

Wednesday, Feb. 11: DRAFT Abstract (bring hard copy and electronic copy on laptop)

Wednesday, Feb. 18: FINAL Abstract (bring hard copy)

Friday, Feb. 20: Undergraduate Research Symposium (optional)*

For those who wish to submit their abstract to the Undergraduate Research Symposium, please indicate so on your DRAFT and FINAL abstracts for timely feedback from Batya and Dave. The symposium takes place Friday, May 15, Mary Gates Hall.

150-word Program Abstract

Spring 2009:

The Informatics Capstone committee requires a shorter abstract to be included in a program for the Spring capstone event. This abstract will be due in the Spring, along with your final posters. The due date will be announced by Student Services.

Abstract Guidelines:

An abstract is a summary of your research usually presented in skeletal form, which concentrates on the essentials of a larger idea or claim. Your abstract should include sufficient information for reviewers to judge the nature and significance of your research, the adequacy of the methodology employed, and the nature of the results and/or progress to date.

Abstract Format:

The format for your abstract should follow that for abstracts submitted to the Undergraduate Research Symposium. That format is as follows:

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#### **Project Title**

*Student Name, Class Standing, Major(s)*

*Scholarships (if applicable)*

*Mentor: Batya Friedman and Dave Hendry, The Information School\**

Abstract: Limited to one paragraph (~300 words). Do not enter any line breaks.

\* If you have worked closely with another faculty member on your capstone project who would be an appropriate faculty sponsor, please name that person here in lieu of Batya and Dave.

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Undergraduate Research Symposium (URS):

For information about the Undergraduate Research Symposium, please see:

<http://www.washington.edu/research/urp/symp/applicationinfo.html>

The following information is from the URS web site.

The Undergraduate Research Symposium will take place on Friday, May 15, 2009, Mary Gates Hall

Deadline to apply is Friday, February 20, 2009.

Application Process

1. Prepare a research abstract as outlined by the Abstract Guidelines (see above).
2. Decide on your Presentation Format (i.e., poster/oral)
3. Complete the online application.

Instructions

- You MUST submit your abstract using the Word document format on the web site: Undergraduate Research Program Abstract Template.
- For group presentations, only the primary presenter should submit the abstract and complete the online application form.
- Abstracts must be no longer than 300 words in length. Use the "word count" function in your toolbar to verify.
- Please do not submit your abstract until it has been approved by Batya or Dave. Abstracts must be submitted online on February 20, 2009.

Sample Abstract 1:

LiquidBrowse: Using Interface Continuity to Improve Web Browsing

Ethan John, Senior, Computer Science

Mentor: Professor David Hendry, Information School

When browsing the Web, users are often confronted with the issue of interface discontinuity. Users often have difficulty anticipating what they will see after clicking a link or requesting a new web page. To make matters worse, the Internet changes constantly, and users are often presented with new locations that contain unknown content. What a user remembers from yesterday is not necessarily what they will see today. Similarly, users often seem to have a difficult time navigating browser history based only upon page titles and a vague sense of chronology. It would be extremely desirable to give surfers a chance to preview new content while removing the sense of committal that comes with loading a new page or following a link. Previews could take many forms, though our current ideas involve semi-transparent versions of past or future pages in order to give users a clear view of what's coming, without completely removing them from the scope of their starting page. To investigate how previewing pages would improve web browsing, we will be building a browser that attempts to alleviate these problems through the judicious use of transparency and animation using the OpenGL graphics technology. After completing this prototype, we will be conducting user tests in an effort to better understand how these methods might actually impact everyday users. Through this research, we would like to better understand how users browse the web, whether certain types of browsing are preferred for certain tasks, and whether the principles of continuity are worth investing in other forms of interface design.

Sample Abstract 2:

PedalPaths: A Direction Mapping Service for Bicyclists

Dustin L. Hodge, Senior, Informatics and Applied Computational Mathematical Sciences

Sam Herz, Senior, Informatics

Andrew Thivyanathan, Senior, Informatics

Mentors: Batya Friedman and Dave Hendry, Information School

A national survey by the US Bureau of Transportation Statistics shows that, in Seattle, only 25% of people who say they want to cycle actually do. The long-term goal of the PedalPaths project is to lower the entry barriers for cycling and make it a more attractive – and more used – option for commuting and exercise. The current work focuses on designing an interactive route planning system for bicyclists, which addresses the issues of safety, time, convenience, and rider comfort. The system is being implemented with Google Maps. To better understand how different levels of cyclists perceive and get past entry barriers, we conducted seven open-ended interviews (four experienced cyclists, three non-cyclists). In addition, we posted an open survey on Information School listservs, Facebook, and the Cascade Bicycle Club forums; more than 140 responses have been returned. We found that riders vary not only by experience, but also by type (e.g., recreationalists, commuters, etc.). We have concluded that our system should facilitate cautious cyclists. Further, not only has our research shown the need for a different algorithmic solution using bicycle paths and cuts through city parks, topographic data, and avoiding dangerous cycling areas, but it has given us insight into how to present this information on a map in a way that is meaningful to cyclists. In addition, we believe that this tool will become more useful when placed in a social context, such as an online social networking community. Informed by this analysis, we have designed a prototype of a web-based service, which lowers the barriers to enter into the cycling subculture in the Seattle area, and specifically improves route finding for people new to cycling. Future work will seek to improve the usability and usefulness of the system and to promote social interaction and bicycle advocacy.