

# ANATOMY OF AN ABSTRACT

## INFO 490 Informatics Capstone

### Winter 2008

#### Due Dates:

Wednesday, Feb. 13: DRAFT Abstract (bring hard copy and electronic copy on laptop)  
Wednesday, Feb. 20: FINAL Abstract (bring hard copy)

Friday, Feb. 22 at 5 pm: Undergraduate Research Symposium (optional)\*

- For those who wish to submit their abstract to the Undergraduate Research Symposium, please indicate so on your abstract. Please also drop an electronic copy of your abstract in the course drop box.
- On Friday, Feb. 22, Dave will be available in his office (330P MGH) from 11:00 am – 1:30 pm to sign abstracts.

#### 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 16, 2008, 12 noon - 5pm in Mary Gates Hall

Deadline to apply is 5pm Friday, February 22, 2008.

### 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.
- You must also submit a paper copy of the abstract, signed by your faculty mentor, to the Undergraduate Research Program in 120 Mary Gates Hall by 5 pm on February 22nd, 2008.

### 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:

#### **Verde Base: An Automated Lunar Greenhouse**

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

*Mentor: Faculty Name, Department or School*

A plan cultivated to provide food supply for a permanent station on the Moon. Verde Base: An automated lunar greenhouse is based in a lava tube in the South Pole region, using inflatable liners to enclose a pressurized environment. It will yield grains such as wheat and rice for a 6-12 person crew. Plants will be grown in a lunar regolith derived soil combined with starter compost brought from Earth. An experiment was conducted on Earth for this feasibility study with simulated regolith and compost. Radishes were grown to determine which regolith-compost ratio produces the best results for growth. Inedible plant products will be reused as compost to fertilize the soil in future planting cycles. Verde Base will use a combination of solar panels and a sunlight reflection system to heat, light, and power the greenhouse during the day as well as survive the 14-days long lunar nighttime. The enclosed system will use robots to farm and store plants for use, as well as to mine water at the South Pole. This research was conducted as part of the NASA Institute for Advanced Concepts' Student Visions of the Future Program. Verde Base could become a possible construction project in the next 10-50 years.