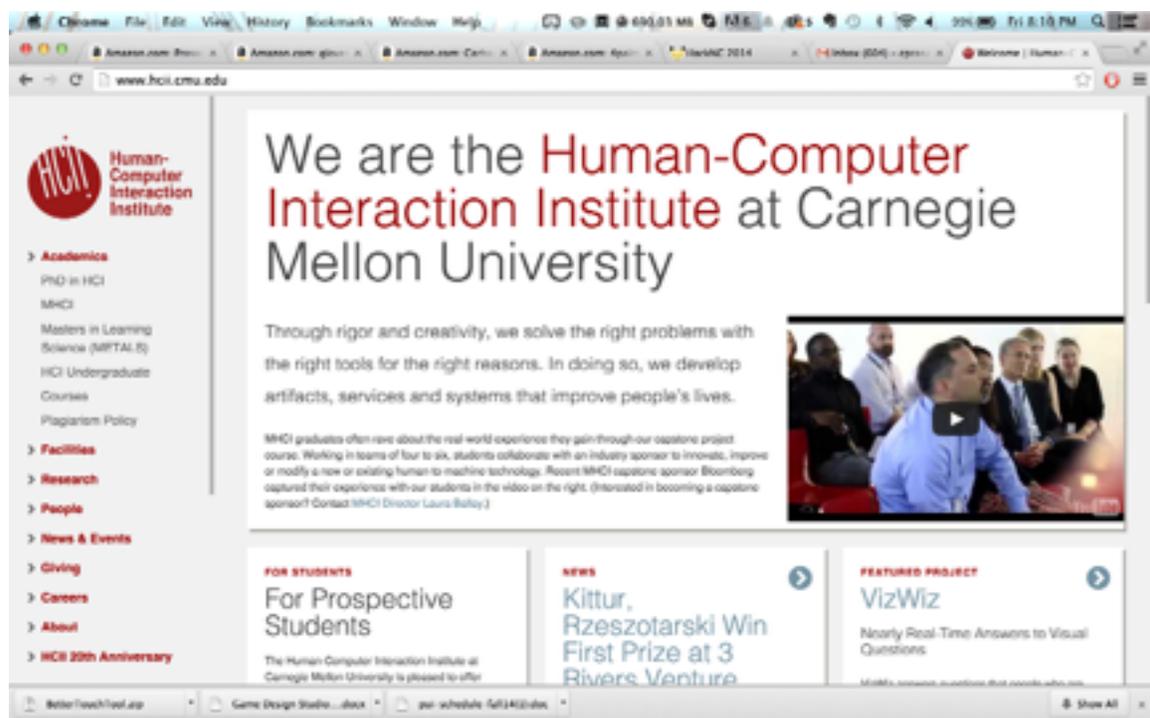
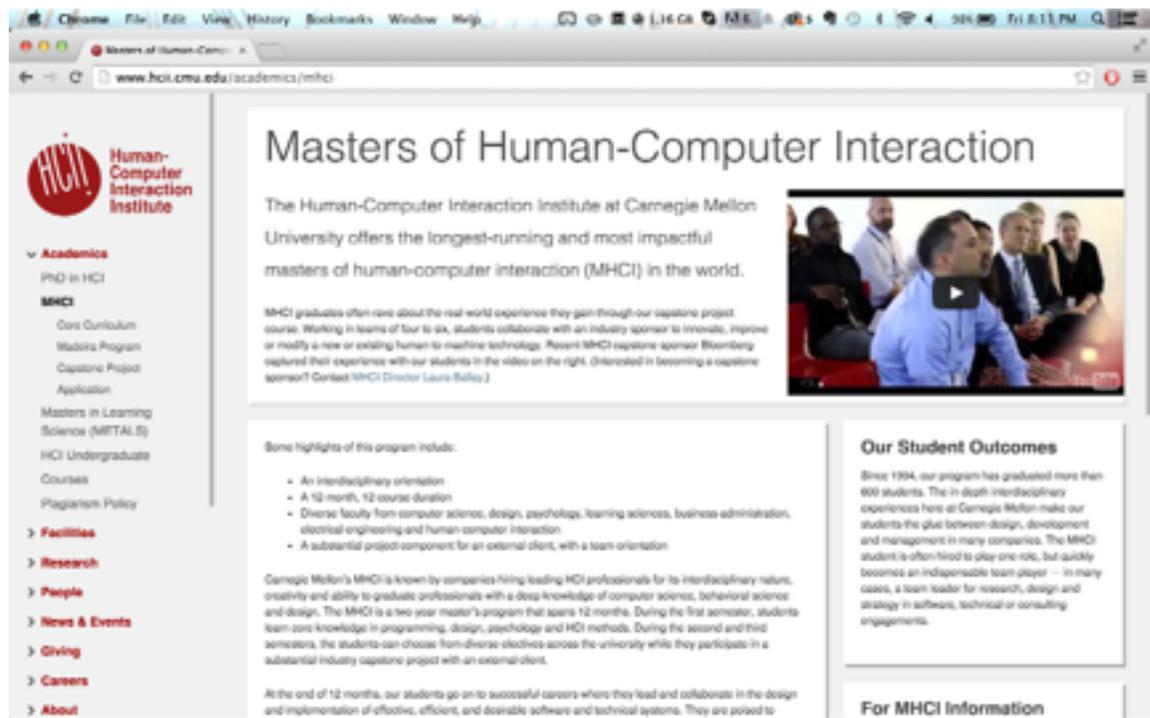


Design of A/B Test of the HCII Web Site

Research Question

Would search usage increase if the search field was more prominent?

The search usage in the current version of the HCII website is almost nil. The search field occupies a very low profile in the current version of the website and is completely hidden if the page is set to 110% zoom or if there is an active download bar.



As it is evident from the screenshots, there is no indication that there is a search bar. Clicking on the search icon opens up the search field below the current search icon but there is no feedback provided to the user. The user should scroll down by themselves to see the search field. There is a lot of drop outs that occur after the 2nd level interaction in the website and that might correspond to users who drop out after not finding the information they were looking for. Making them use the search might help them find the information they were looking for at a faster rate and also reduce the drop out rate.

Hypotheses

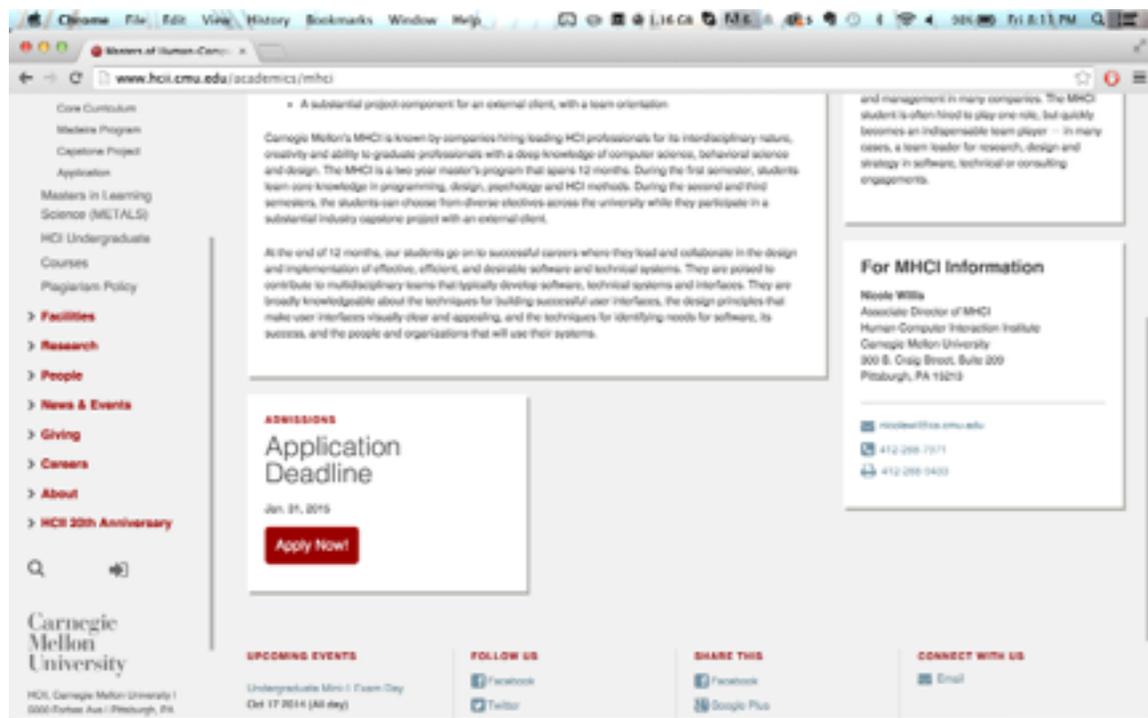
I hypothesize that a more prominent search field that is easily noticeable will lead to increased search usage. And conversely, if the null hypothesis were to hold true, then there would be no change in the search usage between the current website and the modified version.

Methods

Website Designs and Conditions

I plan to change the location of the search bar to make it more prominent to the users. There will be two new locations. All the other elements of the page will remain the same to prevent any bias in the results. So if there is any change in the search usage it is because of the change in the search bar location.

Current Location :



The screenshot shows a web browser window displaying the website www.hci.cmu.edu/academics/mhc/. The browser's address bar and search icon are visible at the top. The website layout includes a left sidebar with navigation links such as 'Core Curriculum', 'Masters Program', 'Capstone Project', 'Application', 'Masters in Learning Science (MELTS)', 'HCI Undergraduate', 'Courses', and 'Plagiarism Policy'. A search icon is located in the bottom left corner of the page. The main content area features a large text block describing the MHC program, an 'ADMISSIONS Application Deadline' box with a date of Jan. 31, 2015, and a 'Apply Now!' button. A right sidebar contains 'For MHC Information' and contact details for Nicole Mills. The footer includes 'UPCOMING EVENTS', 'FOLLOW US' (Facebook, Twitter), 'SHARE THIS' (Facebook, Google Plus), and 'CONNECT WITH US' (Email).

Location 1 :

The screenshot shows the top portion of the website. On the left is a vertical navigation menu with the HCI logo and the text 'Human-Computer Interaction Institute'. Below the logo are search and navigation icons, followed by a list of menu items: 'Academics', 'Facilities', 'Research', 'People', 'News & Events', 'Giving', 'Careers', and 'About'. The main content area features a large header with the text 'We are the Human-Computer Interaction Institute at Carnegie Mellon University'. Below the header is a paragraph: 'Through rigor and creativity, we solve the right problems with the right tools for the right reasons. In doing so, we develop artifacts, services and systems that improve people's lives.' To the right of this text is a video player showing a group of people in a meeting. Below the main text is a small paragraph about capstone projects. At the bottom of the main content area are three promotional boxes: 'FOR STUDENTS For Prospective Students', 'NEWS Kittur, Rzeszotarski Win First Prize at 3 Rivers Venture', and 'FEATURED PROJECT VizWiz Nearly Real-Time Answers to Visual Questions'.

Location 2 :

This screenshot is identical to the one at Location 1, but it includes an additional menu item at the bottom of the navigation list: 'HCI 20th Anniversary'. The rest of the page content, including the header, main text, video, and promotional boxes, remains the same.

The target population

The target population is prospective MHCI students who frequently visit the HCII website for information. These users know what they are looking for and they tend to search for that particular information and any improvement in the search functionality will benefit them greatly.

Data collection and Duration

Data collected will be in terms of search usage. I plan to tabulate the search usage against the corresponding location of the search field to get a better overview of how the location change affects the search usage. For further analysis, I plan to use a stacked histogram to see which location directly corresponds to a better proportion of search usage.

	Current Location	Location 1	Location 2
Search Usage			

I plan to run the test for at least a month during the peak application season (when there are more target users) to make sure that the results are consistent.

Acknowledgments

I would like to acknowledge Owen Tong for explaining to me the process of A/B testing and Michael Richardson for the discussion on interpreting the changes made during A/B testing.