

## Research Center Website Case Description

### Organization

The Center for AI Research (CAIR – pronounced *care*) is a new research center at a well-regarded iSchool in the Midwestern United States. CAIR was formed during the previous academic year. It currently has 3 funded research projects. Two of those projects are funded by the National Science Foundation (NSF) and were awarded prior to the formation of CAIR. The third project is funded by Google. It was the first project awarded under the CAIR Umbrella.

The Director of CAIR is Professor Ingrid Bellstrom. This is a part-time position, as she has teaching and other responsibilities at the iSchool. The Assistant Director of CAIR is Tanya Green. Tanya reports to Ingrid. Tanya's position is full-time.

Each of the 3 current research projects is headed by a faculty member who is the Principal Investigator (PI). These PIs are considered CAIR affiliated faculty. There are 4 other faculty members who are currently identified as affiliated although they don't currently have active research projects that are CAIR projects. The center has 1 Graduate Assistant (GA) position that provides administrative support for the center. There are 5 Research Assistant (RA) positions that are funded by and contribute to the 3 active research projects. GA and RA positions are part-time positions in which graduate students work 20 hours per week.

### Current System

The project currently under consideration is the development of a new website for CAIR. The current CAIR website was cobbled together quickly by Tanya and the CAIR GA last year. It is a static site that presents basic information on a few pages that are updated regularly by Tanya and the CAIR GA. The current pages include:

- About CAIR
- CAIR People
- CAIR Projects
- CAIR Publications

The current CAIR website was always intended to be temporary. This site gives CAIR a Web presence and presents basic information of interest to research funders, research partners, iSchool administration, faculty, and students.

## **New System Ideas - Common**

Several stakeholders were interviewed to gather the requirements for the new website:

- Ingrid (Director)
- Tanya (Assistant Director)
- Sydney (PI of the largest research project)
- Bill (CAIR GA)

All of the stakeholders agree that the new CAIR website needs to include more topic areas. These might include:

- Events
- Research Partners
- Research Funders

The stakeholders agree that the website needs to be more database-driven with separate pages for each topic. For instance, rather than having just one page that lists all CAIR Projects, there should be an index page of CAIR projects that shows highlights and provides links to detail pages for each project. This index page / detail page design could be applied to many of the topic areas including People, Events, and Research Partners.

The stakeholders also agree that the content for each of the topic areas needs to have a more consistent style and structure. For instance, not all entries that are on the CAIR Publications page use the same citation style. There is hope that taking more of a database-driven content management approach might address these consistency problems.

Further, most stakeholders agree that providing a means to link pages would be important. For instance, a page that mentioned several CAIR affiliated faculty, would also include links to their faculty pages. The same kind of page linking would be useful for publications and events.

Beyond the common themes mentioned above, there were individual ideas presented by the various interviewees. These are presented below.

### **New System Ideas – Ingrid (Director)**

As the Director of the Center, Ingrid is responsible for the budget and schedule for the new website. She is concerned that not all of the requirements will fit into the initial project. She feels strongly that the Events and Research Partners topic areas need to be added in the first implementation of the new website. She is willing to wait for the introduction of the Research Funders topic area.

Ingrid is aware that some stakeholders are interested in using the website data to provide more convenient input for reports to funders and reports to the iSchool administration. While she is interested in this goal, she is concerned that placing too much emphasis on this might delay the new website beyond an acceptable implementation date.

### **New System Ideas – Tanya (Assistant Director)**

Tanya is a strong supporter of the common new system ideas listed above. Tanya and the CAIR GA have been doing all of the work to populate the current CAIR website. She is hoping that taking a database-driven content management approach to the new website might help her distribute the workload of keeping the system populated. For instance, the RAs for each of the research projects could take responsibility for entering events, publications, and people associated with their project. This might allow Tanya and the CAIR GA to spend less time generating content and more time editing and approving content.

Tanya is responsible for writing the annual report for CAIR that is submitted to the iSchool. Quite a lot of the data that goes into the report is the same as that on the CAIR website. Tanya is looking for an easy way to extract the data from the database that drives the CAIR website to make her annual report preparation easier.

### **New System Ideas – Sydney (PI of Largest Project)**

Sydney is looking forward to the new website. He is interested in the database-driven content management approach. He is willing to devote the efforts of his RAs to generating content for events, people, publications, and research partners. Nevertheless, making this investment only makes sense if he can retrieve these data from the system in a friendly format when it is time to create quarterly reports to his funding agency.

### **New System Ideas – Bill (CAIR GA)**

Bill believes that he and Tanya are fast approaching their limit of time available for populating content into the current CAIR website. He believes that as CAIR grows the only feasible approach to populating the CAIR website and keeping it current is to enlist the help of the RAs

from the research projects. He is hoping that database-driven content management features will make this feasible.

Bill is also responsible for making sure that content on the CAIR website is consistent with the content on the various other iSchool Websites. This includes content related to events, projects, and the description of the center. Particularly with regard to events, Bill is hoping that some kind of interface can be built that will make sure that CAIR events are published to the iSchool events list easily.

### **Non-Functional Requirements**

The stakeholders agree that the new CAIR website must meet iSchool standards for usability, security, performance, and supportability. While they are open to various technical solutions, Tanya has expressed a preference for a solution based upon Python, Django, and Wagtail.