Connecting students with research positions has had no unified solution used by most students and stakeholders. Thus, it is difficult for undergraduate students to obtain and benefit from research positions.

The purpose of the IPRO 321 team is to facilitate the performance of undergraduate research at Illinois Institute of Technology for the benefit of undergraduate students and faculty by developing a robust website. More specifically, the ResearchWeb team strives to connect undergraduate students to resources for performing research here on the IIT campus including opportunities, funding, laboratory equipment, and expertise. The team aims to assist the student researcher in all phases of research: connecting, performing, and presenting.

Objectives

- Increase communication of research opportunities to IIT students
- Ease the undergraduate research hiring process for faculty
- Enhance collaboration between current undergraduate researchers
- Disseminate information about upcoming research conferences
- Enhance communication between current student researchers and interested students not involved in research
- Implement ResearchWeb
- Advertise ResearchWeb

Current Solution

- Undergraduate Student Interested in Research
  - Professor/Advisor
  - Apply through OUR system
  - Friend who works in lab
  - Other connections

- Student Performing Research

ResearchWeb Solution

- Undergraduate Student Interested in Research
  - ResearchWeb
  - Undergraduate Student Interested in Research
    - ResearchWeb

- Student Performing Research

Results: Surveys

Interest in a Website for Undergraduates to View and Apply for Research Positions

- Faculty
  - Yes
  - Maybe
  - No

- Students
  - Yes
  - Maybe
  - No

Interest in Undergraduate Research Positions

- Faculty in Establishing Undergraduate Research
  - Yes
  - Maybe
  - No

- Students in Having Undergraduate Research Positions
  - Yes
  - Maybe
  - No

According to the survey results, the IIT community is also interested in the following features:

- Research Position Database
- Laboratory Profiles
- Conference Database
- Tutorials

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Results: Stakeholders

ResearchWeb Stakeholders

OUR
Faculty
Undergraduate Students
Admission
Other Administration

Identifying key stakeholders helped the team prioritize tasks and understand the impact of the project.

Results: Integration

Connect through MyIIT

Results: ResearchWeb

Research Position Database

The research position database allows students to find available research positions. It also allows faculty to post new positions as they are available.

Laboratory Profiles

The laboratory profiles feature allows laboratory administrators to post information about research projects happening in their lab. Research positions available in these labs will also appear on their profiles.

Conference Database

The conference database allows students to post and find available research conferences. Conferences with activities specifically for undergraduates are marked.

Tutorials

The tutorials feature allows users to look-up and post information about useful laboratory techniques, software, and equipment.

Obstacles

Securing exchange of information between MyIIT and ResearchWeb
★ Solution: ResearchWeb and MyIIT exchange a secret password as they pass information.

Administrative backlog in the Office of Undergraduate Research (OUR)
★ Solution: ResearchWeb is doing a crowdsource.

Generating content for the research position database
★ Solution: An easy Google form was created and emailed to faculty both directly and through department administrators. The team also met with several department heads inspiring them to encourage faculty to open positions to undergraduates.

Project Future

★ IPRO 321 will continue in the fall of 2010. The main objective of the team will be the development of an undergraduate research journal specifically for IIT students.
★ The ResearchWeb maintenance is expected to transition to a work-study student.
★ ResearchWeb envisions expansion of its reach beyond IIT allowing professors from outside institutions to establish labs and post positions.

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