

CMSC451 - CS-24-333

Developing a Central Hub for Gender Outcome Programs in STEMM Project Proposal

Current State

1. There is no central repository of information about strategies to incorporate or improve gender equity at higher education institutions. Currently, administrators would have to search through the literature manually to find relevant studies and strategies that are applicable to their institutional characteristics.

Problem Statement

1. Women are very underrepresented in the STEMM field and our main goal is to create a central repository to provide information on how to promote gender equity in faculty and leadership positions in higher education!

Business and Functional Requirements

Must Have:

1. Building a repository that serves as a central hub for university administrators to access.
 - a. Easy to navigate
 - b. Be able to filter information (via fillable forms or search bar)
 - c. Dynamic website/easy to manage and update
 - i. Access for administrators (users) and curators
 1. Two separate interfaces
 - d. Publications linked on website

Like to have:

1. Social network
 - a. Ability to comment and communicate with other users
2. Automatically gathered information
 - a. Using chat gpt to find relevant papers
 - b. Using chat gpt to gather metadata
 - c. Using chat gpt to tag papers with keywords
3. Automated curation
 - a. Efficiently find papers that meet criteria.
 - b. Automatically found manuscripts are tagged for curator review
4. Account login
 - a. Allows users to save papers and information
 - b. Curator review login (not for general users)

Won't have:

1. Back end database
2. Papers readable on website
3. Exhaustive search of papers
 - a. Will be able to add more later on

Constraints

1. Time
 - a. Will have limited papers in our repository because there won't be time to do an exhaustive search
 - b. Only time for a prototype of the repository
2. User Satisfaction

- a. Ensuring the website is easily accessible

Solution

1. Creating a repository using a framework like Angular in order to form a central hub for administrators of higher education institutions to access papers. This solution is made with the goal of drawing more support towards the advancement of women in the STEMM academic workforce.

Resources

1. Add a framework for building the website
 - a. React, Angular, Node.js

Stakeholders

1. Susan Kornstein
2. Molly Hyer
3. Amy Olex