INNOVATION LAB PROJECT

IITResearchNet

Connecting Faculty and Students for Academic Research

This is a collaborative platform designed to connect faculty and students across IITs for academic research.

Problems

- Research is essential in academic growth, but connecting the right students with faculty for research opportunities is often challenging. Students face limited access to faculty-led projects, and faculty lack an efficient way to find interested and skilled students

- Faculty and students often rely on email or informal channels to communicate and share job opportunities. Without a structured platform, job postings may get lost, students may miss opportunities, and communication between the two parties may be disjointed.

Goals

- Provide a seamless communication platform where faculty and students can connect directly through chat features. This will help students inquire about research opportunities, and faculty can answer questions or share valuable insights regarding projects or roles.

- Organize job opportunities by college, ensuring that students can easily find roles relevant to their institution. This will make it easier for students to find localized opportunities and for faculty to target job postings to the appropriate students.

- By connecting students with research opportunities and jobs in their fields of interest, the platform aims to foster professional growth, career development, and practical experience. It also supports students in applying to roles that match their skill set

SYSTEM ARCHITECTURE

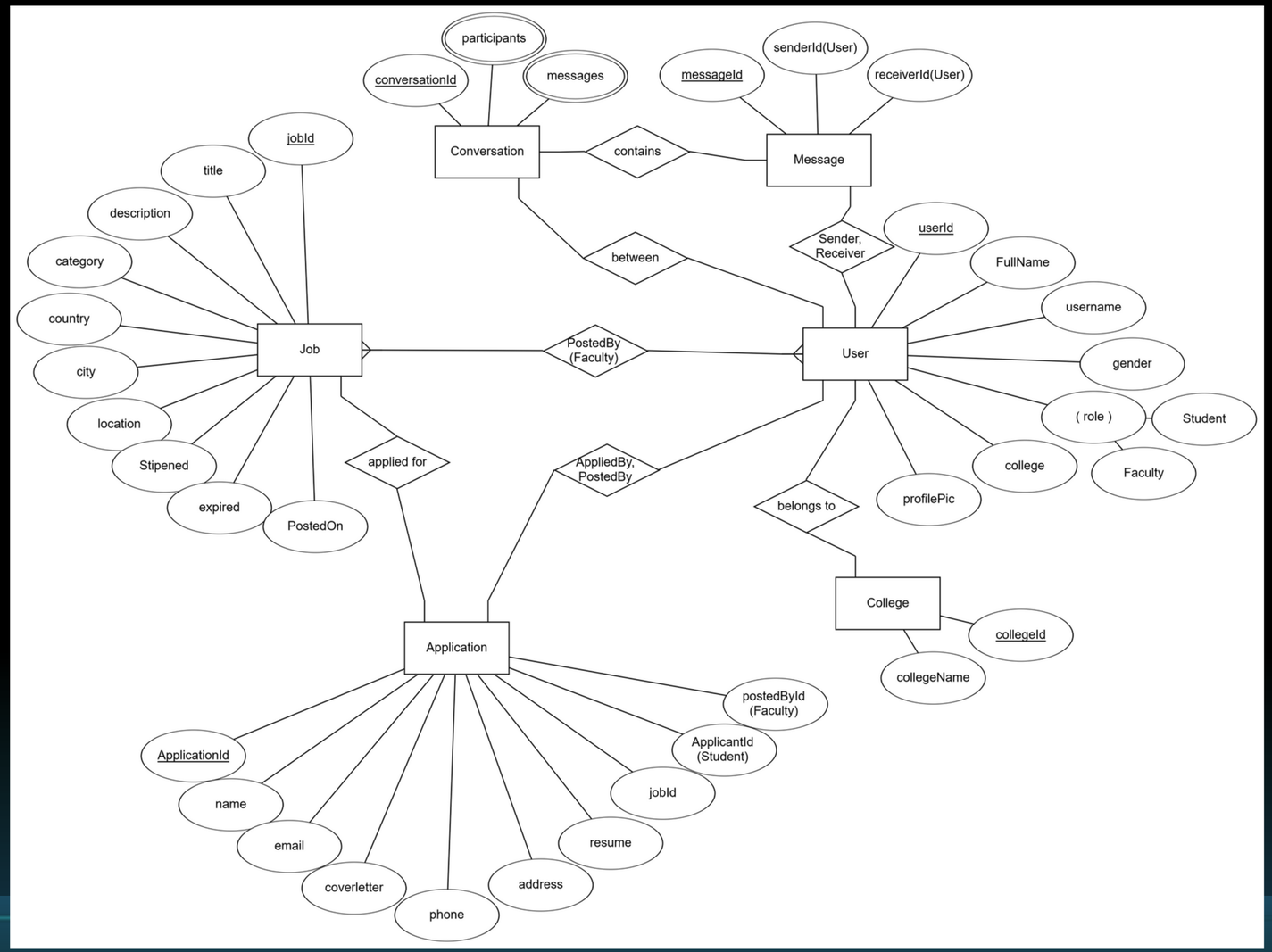
Full-stack MERN application

Frontend: React for a dynamic UI

Backend: Node.js with Express for APIs and real-time functionality

MongoDB for data storage (Users, Jobs, Messages, etc.)

ER Diagram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ROLE BASED FUNCTIONALITIES

FACULTY

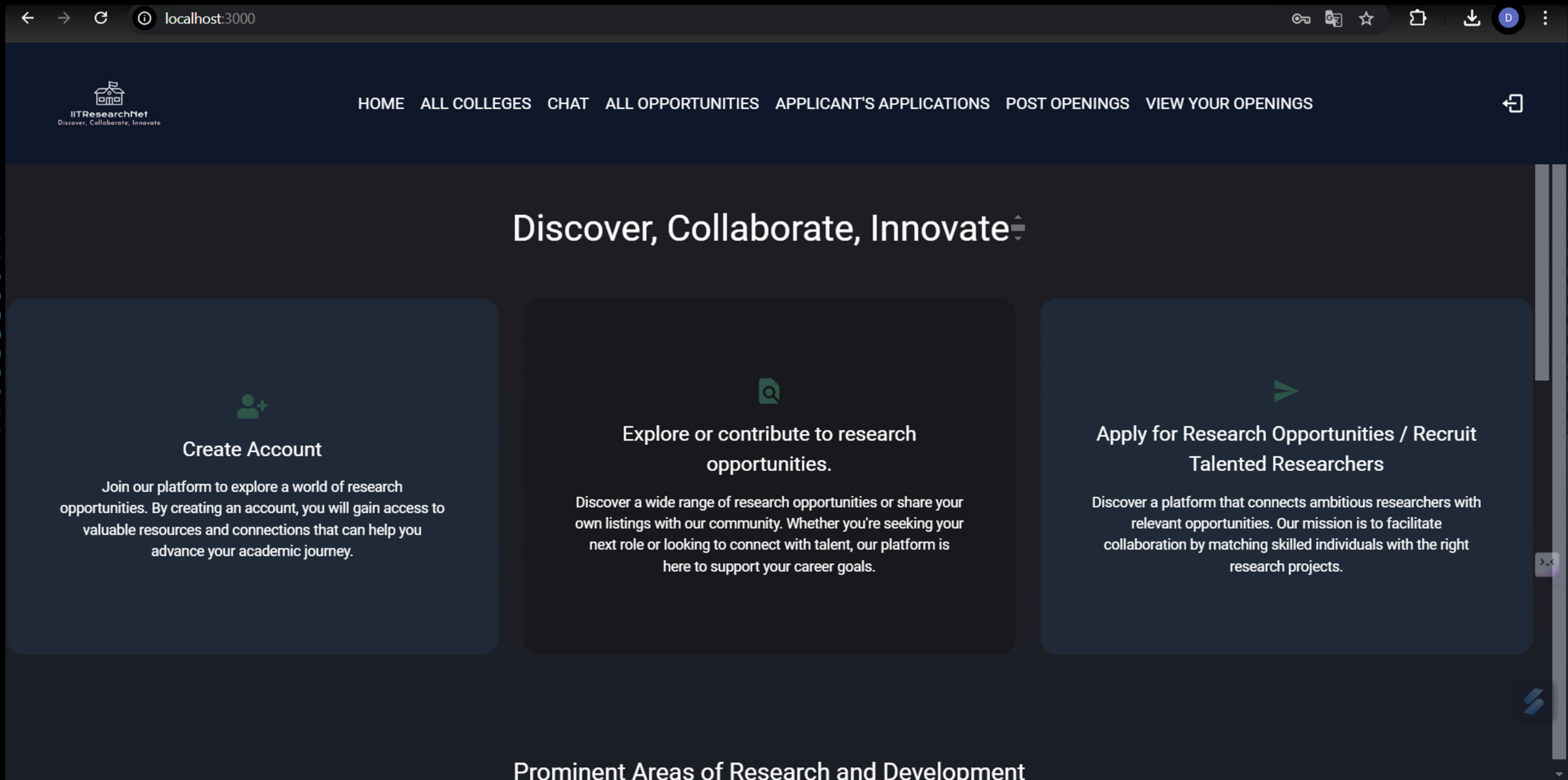
- Post New Jobs: Easily share new research opportunities with students.
- Update Existing Jobs: Modify job details to keep them current.
- Delete Jobs: Remove outdated or filled positions.
- Real-Time Chat: Engage in live communication with students about roles, expectations, and more.

ROLE BASED FUNCTIONALITIES

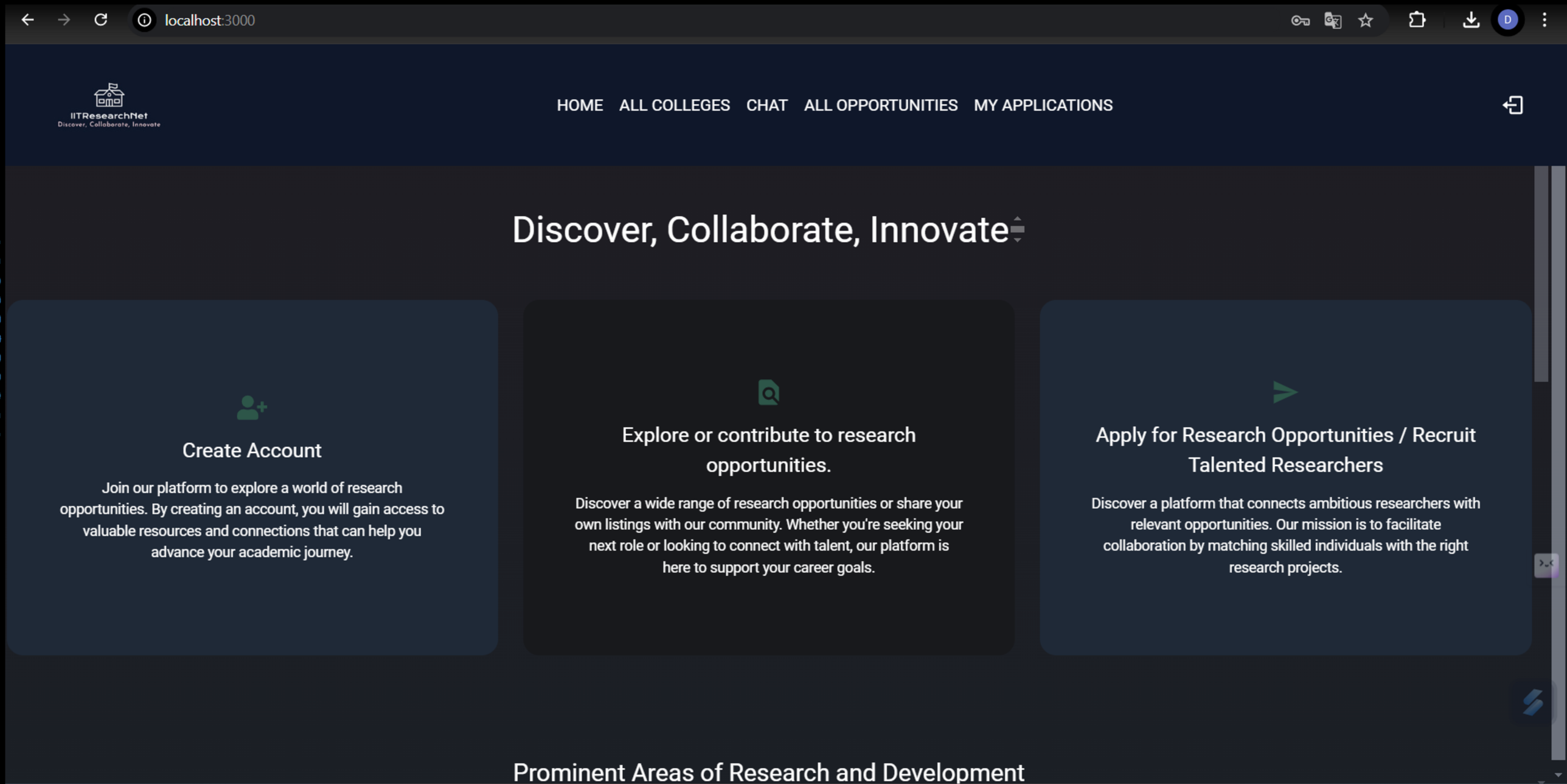
STUDENT

- Explore Opportunities: Browse through various jobs posted by faculty.
- Apply for Jobs: Submit applications for the positions that match your skills and interests.
- Instant Communication: Chat directly with faculty members to inquire or discuss job details.

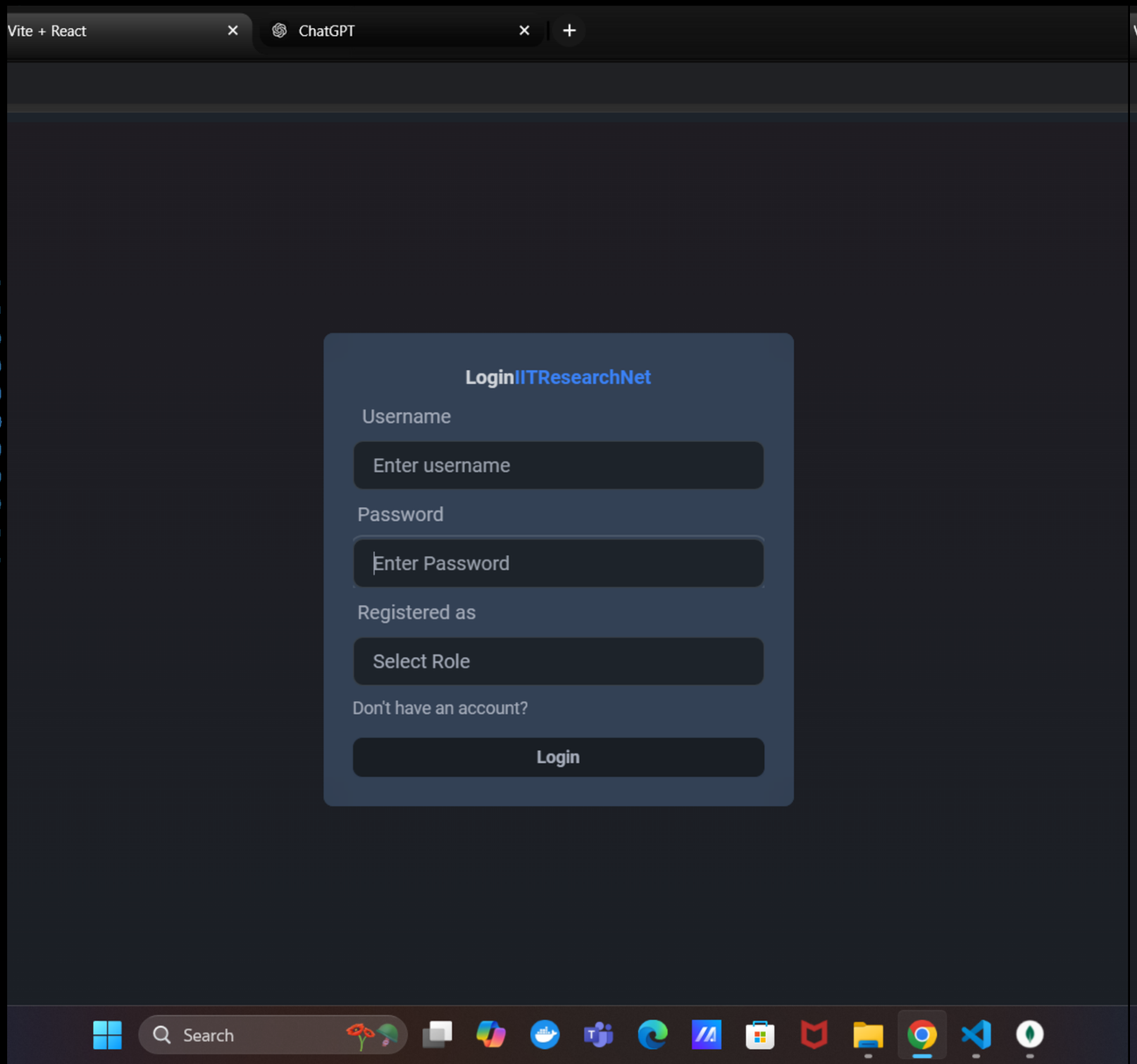
Home Page: Faculty Endpoint

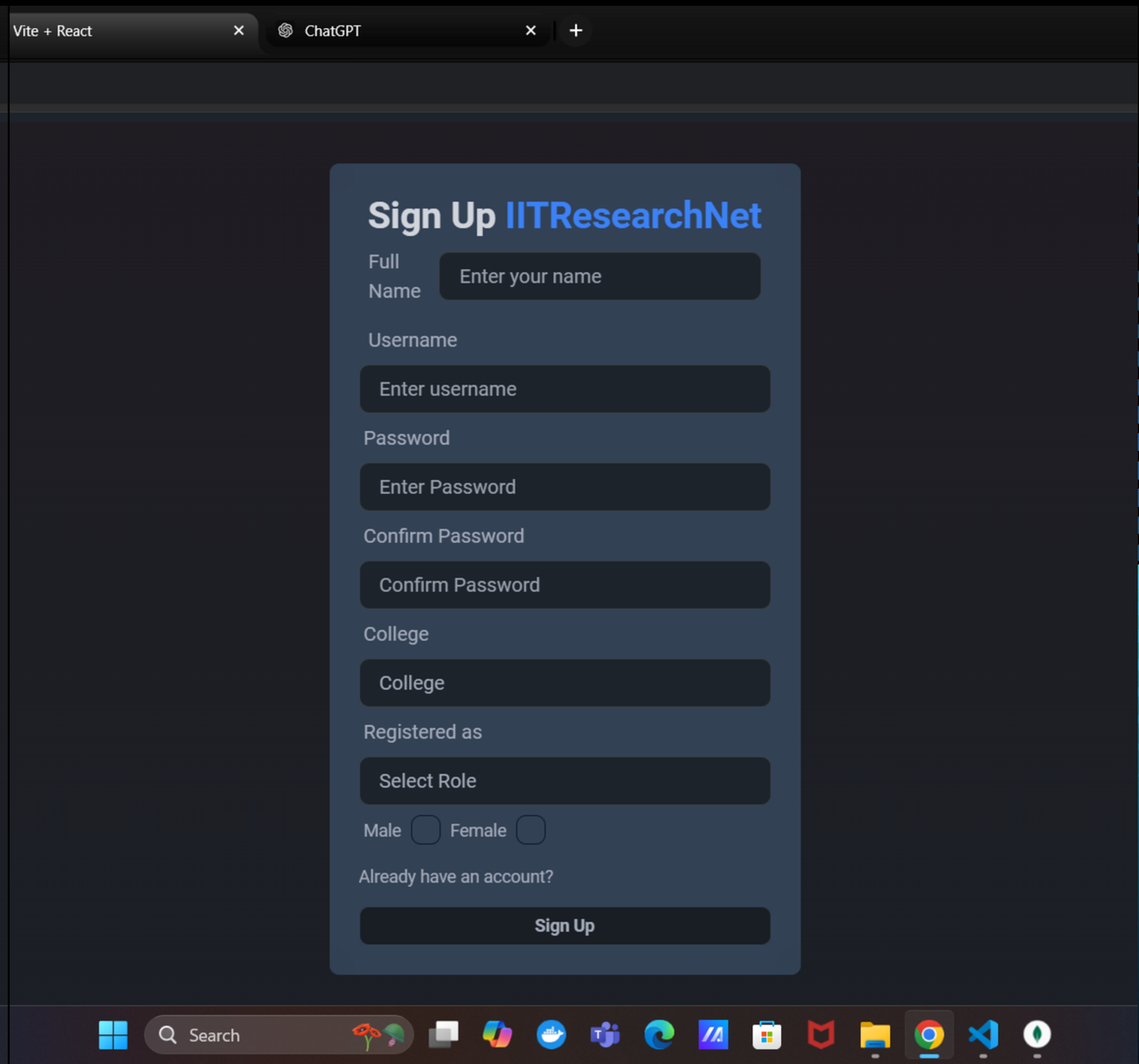


Home Page: Student Endpoint

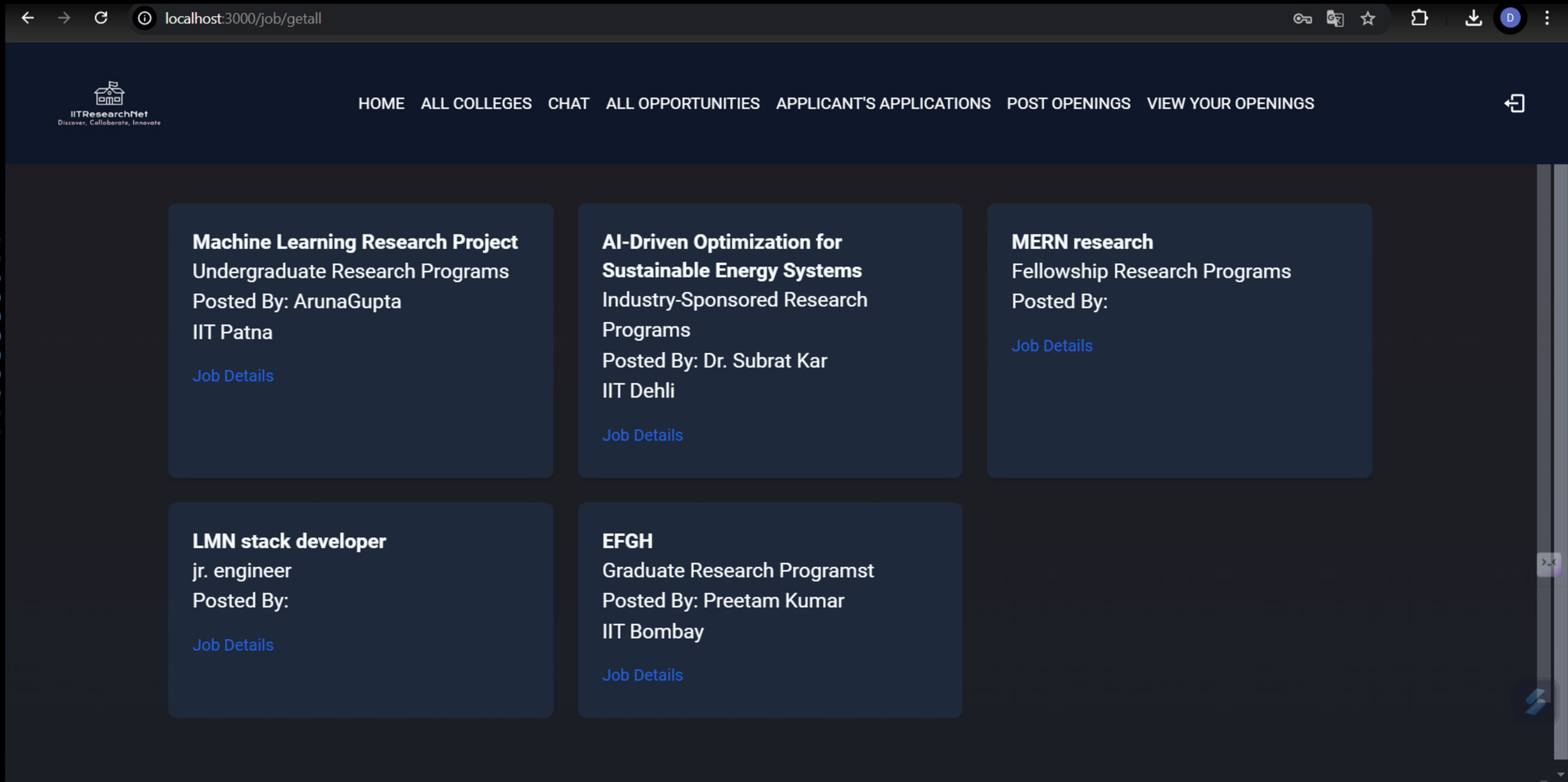


Authentication Page

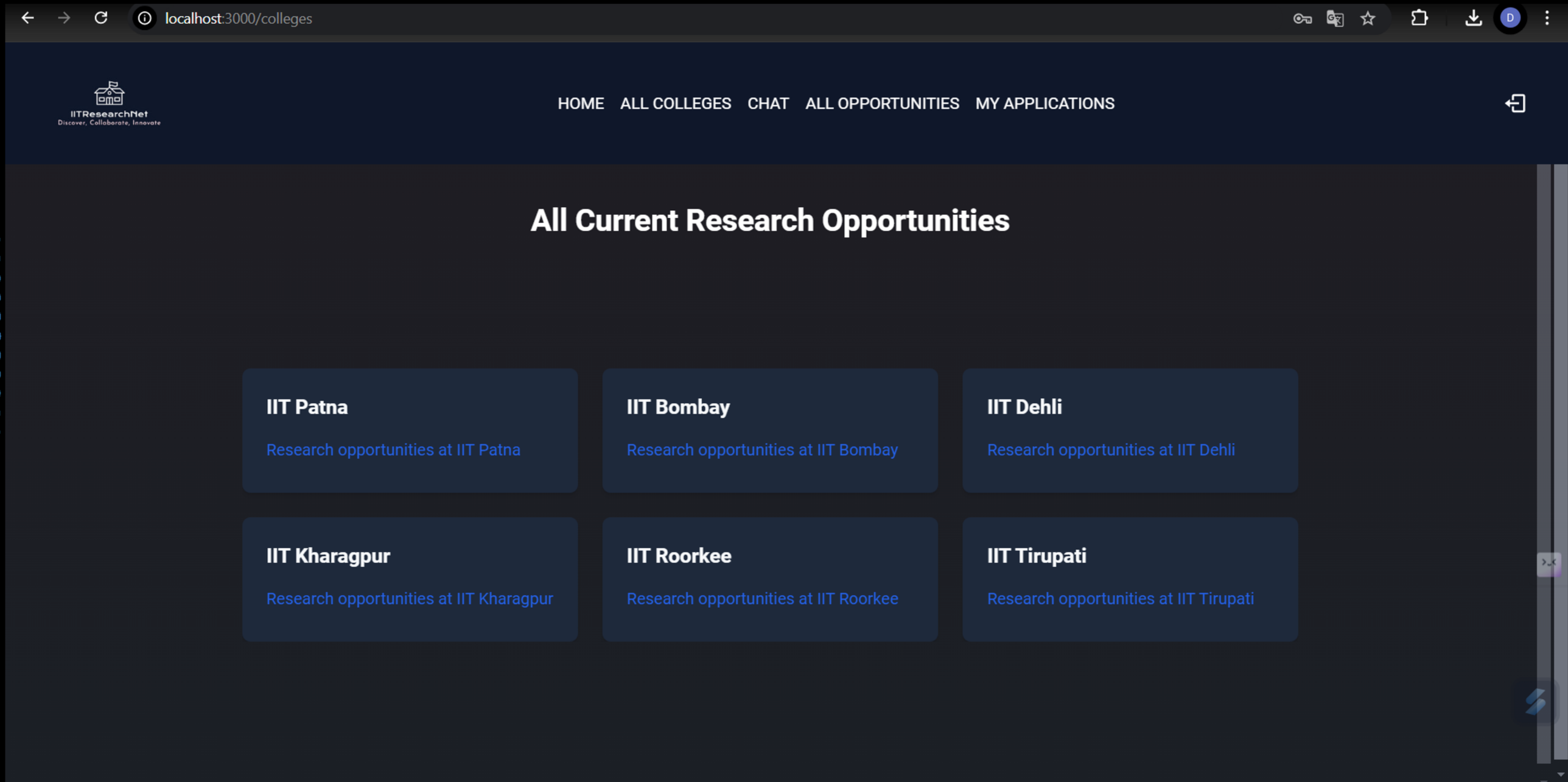




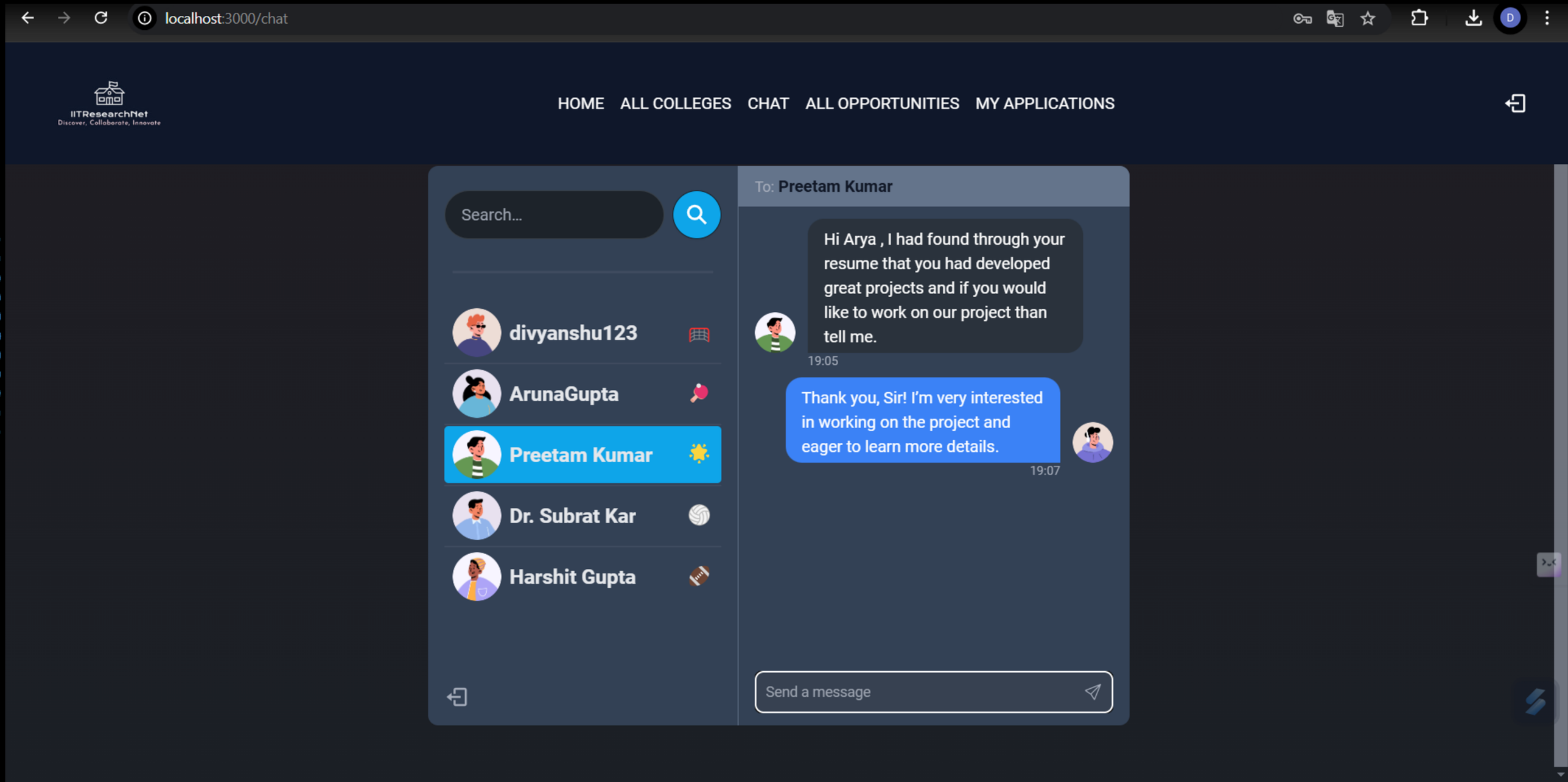
All Opportunities Page



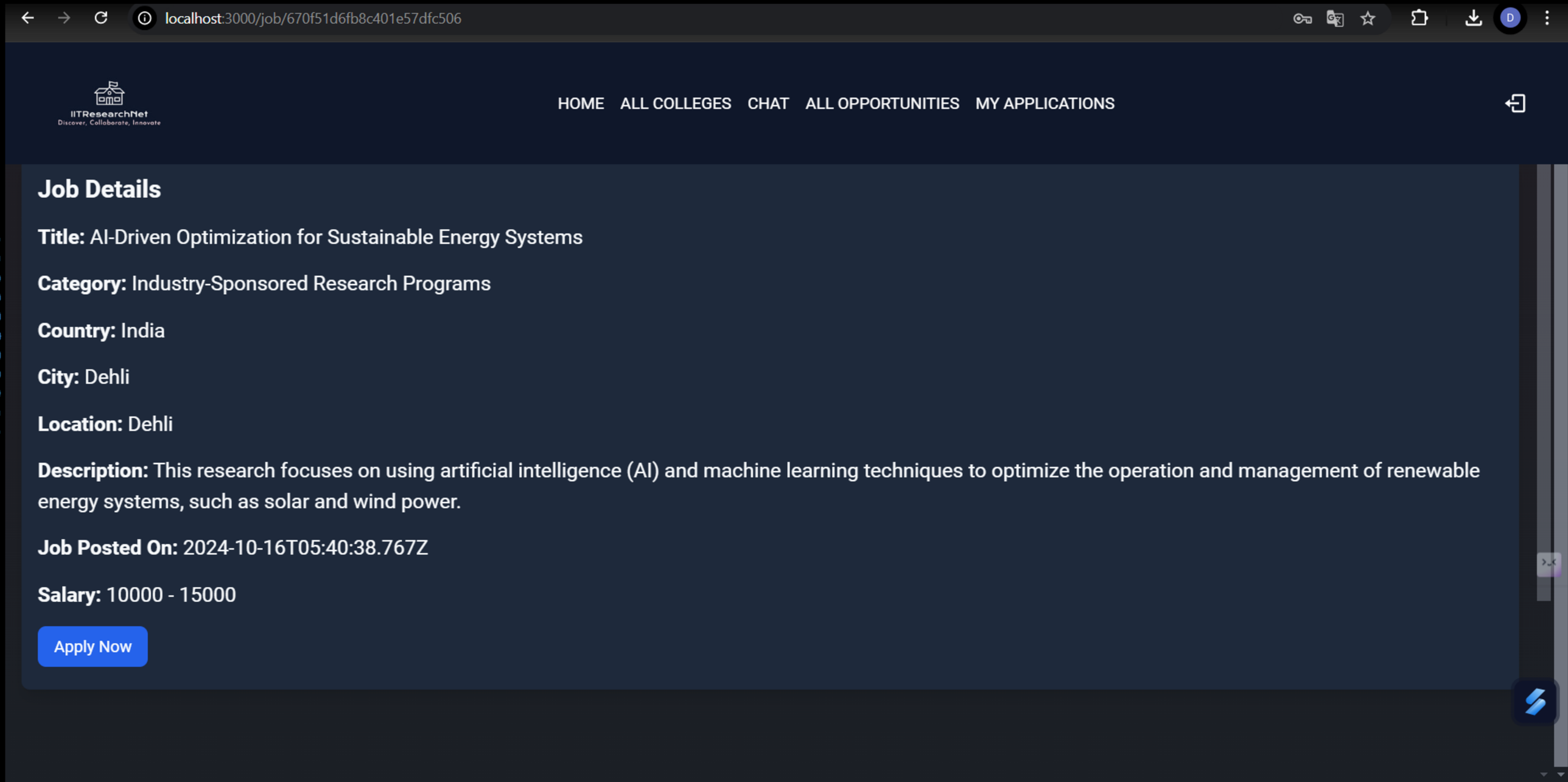
All Opportunities college wise



DISCUSSION PAGE



Job Details Page



Post a New Job

Job Title

Select Category

Country

City

Location

Select Stipend Type

Please provide Stipend Type *

Job Description

Create Job