FACULTY RESEARCH PERFORMANCE MONITERING SYSTEM

A PROJECT REPORT

Submitted by

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ABSTRACT

Tracking academic research and fostering collaboration within departments can be challenging without a centralized system. This project presents a Faculty Research Performance Monitoring System, a web-based platform that enables faculty and Heads of Departments (HODs) to monitor research performance, manage publications, and facilitate collaboration securely.

The system provides HOD-level access to view the overall performance of the department, including faculty-wise citations, H-Index, i10-Index, and recent publications. Individual faculty members can add new publications, track citation trends, and visualize their research impact over time. A built-in access request system allows faculty to request access to another author's work, promoting secure knowledge sharing and enabling collaborations between faculties.

The backend is developed using Flask and Python, with Firebase for real-time storage of publications, requests, and chat history. The frontend leverages HTML, CSS, JavaScript, and Chart.js to provide interactive dashboards, citation graphs, and intuitive user interfaces. The platform also includes a chat feature to facilitate communication between faculty and HODs. Key features include department-level analytics for HODs, personalized dashboards for faculty, secure access requests for publications, publication management, real-time citation updates, and interactive visualizations.

In addition to enhancing transparency and efficiency, the Scholar Analytics Dashboard contributes to data-driven decision-making in academic departments. By visualizing key research metrics and enabling collaborative workflows, it helps institutions identify research strengths, monitor growth areas, and recognize high-performing faculty members. The integration of real-time analytics and communication tools ensures that academic data is always up to date, reducing administrative overhead and fostering a culture of collaboration and continuous improvement within the research ecosystem.

Overall, the system acts as a unified digital workspace that simplifies research management and encourages active academic engagement. Through its streamlined interface and secure data handling, it ensures that both faculty and department heads can focus more on innovation and scholarly progress rather than manual tracking and data compilation. This comprehensive approach makes the Scholar Analytics Dashboard a practical and impactful solution for modern academic environments.

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S.No.	ABBREVIATION/ACRONYM	DESCRIPTION
1	AI	Artificial
2	API	Application Programming Interface
3	CSS	Cascading Style Sheets
4	HTML	Hyper text Markup Language
5	UI	User Interface
6	UX	User Experience
7	HTTP	Hyper text Transfer Protocol
8	SQL	Structured Query Language
9	UML	Unified Modelling Language
10	URL	Uniform Resource Locator
11	JSON	JavaScript Object Notation
12	Colab	Google Colaboratory
13	UI Testing	User Interface Testing