

## Scholar Nest Scholarship Discovery and Mentorship System

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### Abstract

*This paper talks about the problem's students face when they try to get scholarships. They do not know about the scholarships they miss the deadlines they do not have the documents and they are not sure if they are eligible. This is especially true for students who study outside their home state. To solve these problems this paper suggests something called Scholar Nest. It is a website that helps students find scholarships get guidance from mentors and apply for scholarships all in one place. The website connects students with people who have already won scholarships so they can get advice. It also helps students manage their documents keep track of deadlines and figure out if they are eligible, for scholarships. The goal of Scholar Nest is to make it easier for students to get scholarships. It wants to create a system that's easy to use and helps all students no matter where they come from. By putting all these services in one place Scholar Nest makes it easier for students to get the help they need. This means students can focus on their studies and do well in school. Scholar Nest helps students get the scholarships they need to succeed. [1]*

**Keywords:** Scholarship Platform, Mentorship System, Student Support, Scholarship Discovery, Document Management, Deadline Tracking, Eligibility Assistance, Web-Based System, Educational Technology, Centralized Platform

### 1. Introduction

Scholarships are really important for students who want to study. They come in types like merit-based need-based student-specific and career-specific scholarships. These scholarships help students pay for their studies and do not have to worry about money. But many students do not get these scholarships because they do not know about them they miss the deadlines. They have trouble getting the right documents. [2] Simplified aid access directly increases college attendance rates.[6] Financial aid reduces student dropout risk significantly.[7] The way students apply for scholarships now is very complicated. Takes a lot of time. Students have to look for scholarships understand what they need to be eligible and apply for each one separately. They also need to get documents like income certificates, caste certificates and academic records and get them checked by people. This is a lot of work. Can be very confusing and stressful for students. Sometimes

schools and the people who check documents do not talk to each other which makes it take longer to approve documents and process applications. Students have to go to offices or upload documents many times, which takes a lot of effort and time. For students who study outside their home state it is even harder because the rules are different and they do not get help. Students from lower economic backgrounds are highly sensitive to financial aid availability.[8] Most scholarship websites just list scholarships. Have basic application forms. They do not help students with things like guidance, managing documents or keeping track of deadlines. So students have to ask students, friends or look online for help, which may not always be correct or trustworthy. Because of this many students who deserve scholarships do not get them. Social class and college costs directly affect student persistence in higher education. [9] Money problems also make it hard for students to study.

Students who do not have a lot of money often struggle to continue their studies because they do not have financial support. Some students have to work time, which affects their studies while others may delay or even stop studying. Comprehensive support systems combining aid with advising produce better student outcomes.[12] To make things better this paper talks about ScholarNest, a website that makes it easier and better to apply for scholarships. The website has all the features like finding scholarships, getting guidance, managing documents and keeping track of deadlines. It is easy to use. Students can easily search and apply for scholarships. ScholarNest also connects students, with mentors, including people who have gotten scholarships before who can guide them in understanding what they need to be eligible filling out applications and avoiding mistakes. The website helps students keep their documents in one place. Reminds them about important deadlines. [3] The main goal of ScholarNest is to make the scholarship process less complicated, more accessible and more transparent. By providing an environment the system helps students focus more on their studies and reduces the chances of missing opportunities. This way more students can get scholarships. Have equal opportunities to study. The site helps students connect with each other through collaboration, allowing them to share experiences, work together and stay current on new opportunities to continue their education. These connections also make them feel as though they are part of a community that promotes ongoing involvement in scholarships and, ultimately, improves their education

### 1.1.Methods / System Design

The proposed system’s design, i.e., ScholarNest, will be such that it will be a web-based system with a layered approach. The layered approach will ensure efficiency, security, and scalability.

Context-aware recommender systems effectively personalize learning resources based on user profiles. [11]

- **Client Layer**

The clients’ tier will be made up of students, mentors, and administrators.

- **Presentation Layer**

This layer will be responsible for providing a user interface through which users will interact with the system themselves. Various technologies will be used to develop the front-end interface. This front-end will be a responsive one, which means it will work well with mobiles as well as desktop devices. Form validation will be its responsibility.

- **API Gateway Layer**

This will be tasked to link the front-end and back-end applications. It will ensure proper security through tokens based authentication. [4]

- **Business Logic Layer**

Core operations will be done by this layer. It will take care of user authentication. It will manage scholarships. For that, it will use AI technologies. It will offer mentorship services. It will offer notification services.

- **Data Layer**

This layer will be in-charge of storing data.A database system will be used.

**Table 1 Comparison of Scholarship Management Approaches**

System / Study	Technique Used	Main Contribution
Sankalp (2024)	Web-based scholarship portal	Centralized application and tracking
NSP System	Rule-based automation	Government scholarship processing
Scholars Aid	Web scraping and filtering	Personalized scholarship suggestions
Digital Scholarship System	Online document verification	Simplifies application submission

Table 1 compares different scholarship management systems based on their techniques, contributions, and limitations. It shows that existing systems provide only limited features. Therefore, a more complete system like **ScholarNest** is needed.

**Figure 1** The first image shows the **ScholarNest dashboard**, where students can view and filter

available scholarships. The second image shows a **hand gesture in front of the screen**, representing user interaction with the system.



**Figure 1 ScholarNest Scholarship Dashboard**

## 2. Results and Discussion

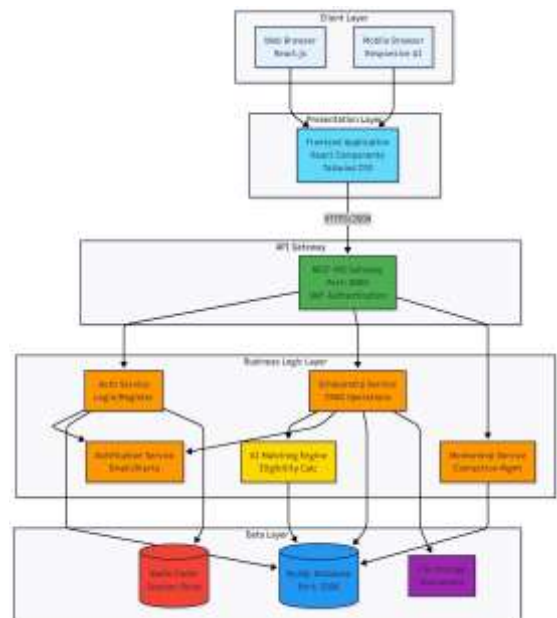
### 2.1. Results

ScholarNest is a system that offers a platform for easy discovery of scholarships. The system offers students an easy means to search for scholarships based on different criteria such as eligibility and category. The system offers a means for students to get suggestions for scholarships that match different student profiles. The system offers a document management system to minimize the need to upload documents repeatedly. The system offers reminders for students to ensure that they never miss a deadline for a scholarship application. The system offers mentorship to students to help them better comprehend the application process for scholarships. The system offers a means to minimize the need for manual work during the application process for a scholarship. The system offers students an easy means to track the status of their applications for a scholarship. The system offers students notifications regarding new scholarships and the results of applications. [5] The system offers students an easy means to access both government and private scholarships. Financial aid availability significantly increases enrollment and persistence among students. [13] The system offers students better guidance and support for the application process for a scholarship. Many eligible students miss scholarships simply due to lack of awareness and guidance. [14] The system

offers students an easy means to improve the efficiency of the application process for a scholarship easily.

### 2.2. Discussion

ScholarNest enhances accessibility to scholarship information. The system helps reduce complexity in the scholarship application process. The personalized recommendations enhance the chances of scholarship selection. The mentorship aspect helps provide guidance to students. The document management helps reduce complexity in the submission process. The notification helps keep the student updated with deadlines. The system helps reduce the use of multiple scholarship websites. The student can use any device with internet connectivity to access the system. The system helps promote transparency in the management of scholarship. However, the system relies on accurate information from the users. Maintaining accurate information on scholarships can be complex. Despite the limitations, the system offers a reliable solution for managing scholarships. User satisfaction was measured using structured feedback to evaluate system usability. [15]



**Figure 2 System architecture for ScholarNest**

## Conclusion

ScholarNest offers an excellent solution in solving the issue of discovering and managing scholarships. The system solves issues such as a lack of awareness and information dissemination. ScholarNest offers a solution that covers scholarship search, application, and mentorship. Students will be able to identify scholarships that they qualify for. The system will help simplify the application process.[3] Personalized recommendations will enhance the accessibility of scholarships. The document management will eliminate repetitive tasks for students. Deadline notifications will help students avoid missing opportunities. [15] The mentorship option will offer guidance from experienced mentors. Well-structured financial aid reduces educational inequality among low-income students. [15] ScholarNest has prospects for improving the scholarship system.

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### References

- [1].R. R. Shevale, R. S. Ahire, P. M. Joshi, U. R. Patil, and S. B. Rajkule, "Sankalp: Development of a Smart Scholarship Portal for Students," in 2024 3rd Edition of IEEE Delhi Section Flagship Conference (DELCON), pp. 1–5, 2024.
- [2].C. S. Lifna and M. Pawar, "Intelligent scholarship disbursement module for National Scholarship Portal (NSP)," in National Conference on Emerging Trends: Innovations and Challenges in IT, Bharati Vidyapeeth's Institute of Management and Information Technology, Navi Mumbai, 2017.
- [3].D. C. Kar, S. A. King, and D. Um, "Supporting Low-Income, Talented Undergraduate Students in Engineering and Computing Sciences with Scholarships and Mentoring," *Journal of Computing Sciences in Colleges*, vol. 38, no. 7, pp. 12–26, 2023.
- [4].M. N. H. Sulaiman and N. Ahmad, "ScholarsAid: A Personalized Scholarship Web Application Based on Web Scraping," *Mathematical Sciences and Informatics Journal (MIJ)*, vol. 4, no. 1, pp. 11–22, 2023.
- [5].P. Pandey and K. A. Mishra, "Scholarship: A Tool for Motivating Students."
- [6].S. M. Dynarski, "Does Aid Matter? Measuring the Effect of Student Aid on College Attendance and Completion," *American Economic Review*, vol. 93, no. 1, pp. 279–288, 2003.
- [7].R. Chen and S. L. DesJardins, "Investigating the Impact of Financial Aid on Student Dropout Risks," *Journal of Higher Education*, vol. 81, no. 2, pp. 179–208, 2010.
- [8].D. E. Heller, "Student Price Response in Higher Education: An Update to Leslie and Brinkman," *Journal of Higher Education*, vol. 68, no. 6, pp. 624–659, 1997.
- [9].M. B. Paulsen and E. P. St. John, "Social Class and College Costs: Examining the Financial Nexus Between College Choice and Persistence," *Journal of Higher Education*, vol. 73, no. 2, pp. 189–236, 2002.
- [10].S. Goldrick-Rab, R. Kelchen, D. N. Harris, and J. Benson, "Reducing Income Inequality in Educational Attainment: Experimental Evidence on the Impact of Financial Aid," *American Journal of Sociology*, vol. 121, no. 6, pp. 1762–1817, 2016.
- [11].K. Verbert, N. Manouselis, X. Ochoa, M. Wolpers, H. Drachsler, and E. Duval, "Context-Aware Recommender Systems for Learning: A Survey," *IEEE Transactions on Learning Technologies*, vol. 5, no. 4, pp. 318–335, 2012.



- [12]. N. W. Hillman, D. A. Tandberg, and J. P. K. Gross, "Performance Funding in Higher Education: Do Financial Incentives Impact College Completions?" *Journal of Higher Education*, vol. 85, no. 6, pp. 826–857, 2014.
- [13]. E. P. Bettinger, "How Financial Aid Affects Persistence," *NBER Working Paper*, vol. 10242, pp. 207–238, 2004.
- [14]. J. E. King, "Missed Opportunities: Students Who Do Not Apply for Financial Aid," *American Council on Education Policy Brief*, vol. 12, no. 1, pp. 1–8, 2006.
- [15]. A. Joshi, S. Kale, S. Chandel, and D. K. Pal, "Likert Scale: Explored and Explained," *British Journal of Applied Science and Technology*, vol. 7, no. 4, pp. 396–403, 2015.