PARSHWANATH CHARITABLE TRUST'S



A.P. SHAH INSTITUTE OF TECHNOLOGY

Department of Computer Science and Engineering
Data Science



Pro Placer Insights using SVM

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Project Guide Ms. Aavani N

Outline

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Introduction

- The system predicts student placement eligibility by evaluating their performance across different parameters.
- Students' performance is analyzed based on multiple dimensions relevant factors internships, stream, backlogs, CGPA, Gender.
- Students benefit from increased placement opportunities as they receive targeted guidance for improvement.
- **Problem Identified:** In regular job placement systems, students don't always get customized feedback on how they're doing or if they're ready for the job market. students might struggle to match their skills with what companies need, causing them to miss out on job opportunities.
- **Solution Proposed:** This system predicts student eligibility for placement offers several advantages. It helps students understand their strengths and weaknesses, enabling them to focus on areas needing improvement.

Objectives

- 1) To develop a recommendation system or matching algorithm that utilizes student performance data to suggest suitable job roles or career paths using SVM.
- 2) To deploy predictive modeling techniques to forecast the likelihood of students securing placements based on their performance profiles.
- 3) To develop interactive dashboards or decision support systems that present students with comprehensive insights into their performance and career prospects using Html and Css
- 4) To design an intuitive user interface that allows students to explore recommended job roles and understand the rationale behind each recommendation.

Literature Survey of the existing system

Author	Year	Title	Method used	Merits	Demerits
[1]Mayur Valte, Shivani Gosavi	2022	"Placement Prediction"	SVM	Interpreta bility	Limited scalability
[2]Tanuja Bedse, Shivani Khairnar	2020	"Student Placement Prediction"	Naïve Bayes, SVM, KNN ,ma chine learning	Captures complex patterns	Computati onally intensive

Author	Year	Title	Methods used	Merits	Demerits
[3] Pranav Regi, Aruna Kumar	2020	"Student Placement Prediction"	Machine Learning, Naïve Bayes	High prediction accuracy	Limited generalizat ion to other fields
[4] Akshay Gunjal, Rohit Dandhare	Patel and 2019202 2	Student Placement Prediction Model"	Data Mining	Robustness to noisy data	Requires large training datasets

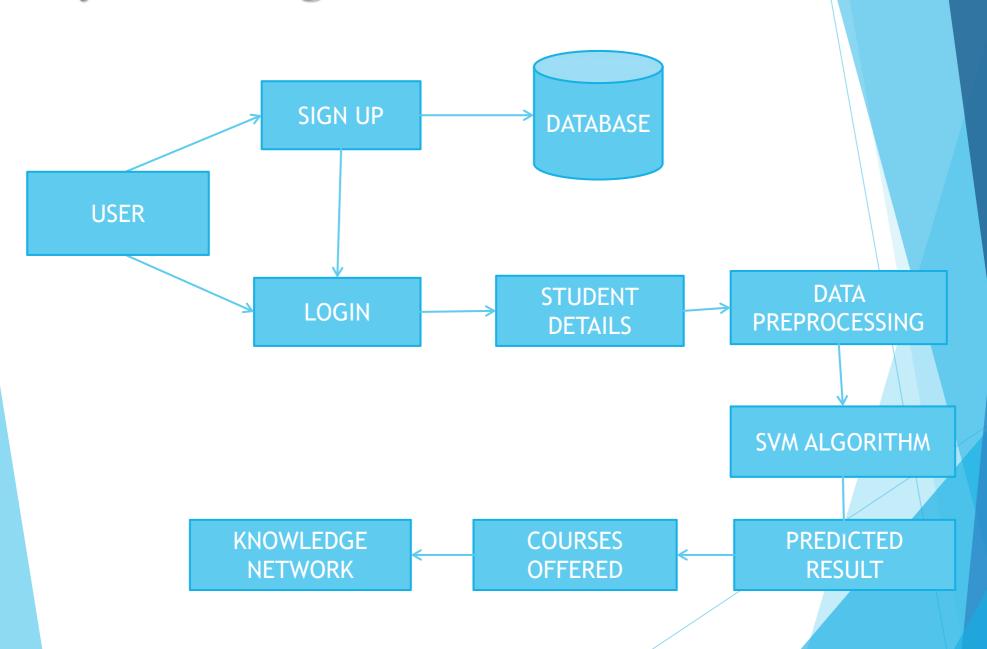
Limitations of existing systems

- The problem of predicting student placement eligibility is not fully solved yet. While systems exist, they struggle with accurately assessing soft skills and providing real-time feedback.
- We need to consider everything when solving this problem. We want to use advanced computer programs (AI), make feedback better, and ensure different kinds of people get placed in jobs.
- New technologies like machine learning and methods that focus on always getting feedback are good. These ways can help us be more accurate and change easily when needed.
- We are confident in addressing key challenges and contributing to solutions, focusing on transparency, fairness, and effectiveness in predicting student placement eligibility.
- Figuring out if students can get placed in jobs is still something we're working on. Even though we have systems that help, they struggle with some things like knowing how good students are at soft skills, being fair, and giving feedback quickly. We need to fix these things to solve the problem completely.

Problem statement

- Students were facing difficulties in accurately predicting their future career prospects and making informed decisions about their education and job opportunities. Such system provides valuable insights and guidance for students in choosing the right path for their future.
- Without a prediction system, it can be challenging to receive personalized career guidance based on your skills and interest.
- It was harder to identify the skills needed for specific jobs, making it challenging to prepare and compete in the job market.
- Without accurate predictions, we might miss out on potential job opportunities that align with your abilities and interests.
- A prediction system can help provide a clear direction and road map for your career, which can be missing without it.

System Design



Technologies and methodologies

- Dataset:
- 1. College Place (104 KB, 2967 Rows, 8 Columns)
- Algorithms:
- 1. Support Vector Machine(SVM)
- 2. Decision Tree
- Software Used:
- 1. VS Code 5.11.3
- 2. Python 3.11.5
- 3. Google Collab 1.1.2
- 4. HTML + CSS 3.04.02
- 5. Flask 2.11
- 6. Pandas 2.2.1
- 7. Matplotlib
- 8. Numpy
- 9. Java script
- 10. CSS
- <u>Database</u>
- 1. phpmyadmin
- 2. mysql

Implementation

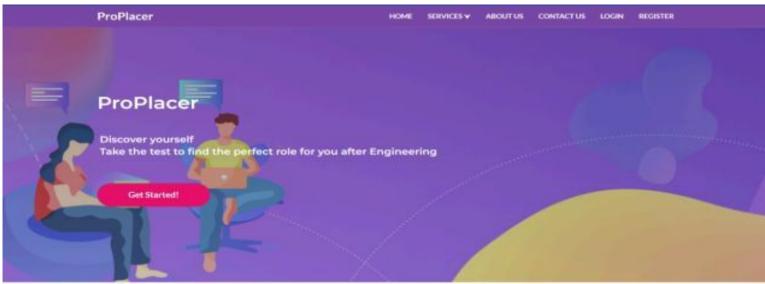


Fig (1) Dashboard

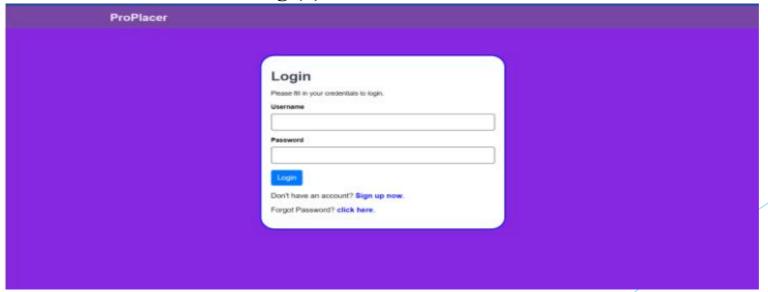


Fig (2) Login

Sign Up Please fill this form to create an account. Username	
Password Confirm Password	
Submit Reset Aiready have an account? Login here.	
	Please fill this form to create an account. Username Password Confirm Password Submit Rosel

Fig (3) Sign Up

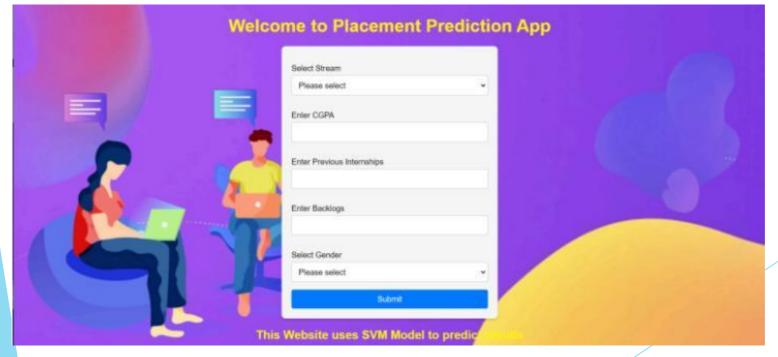


Fig (4) Input Page

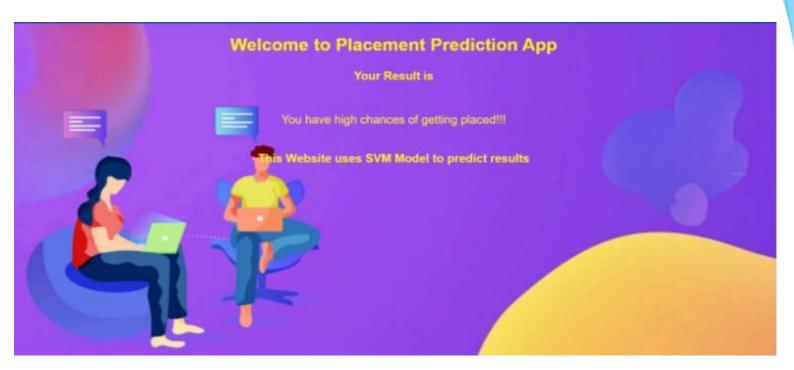


Fig (5.1) Result



Fig (5.2) Result

About ProPlacer

Education seekers get a personalised experience on our site, based on educational background and Placement interest, enabling them to make well informed course and Placement decisions. The decision making is empowered with easy access to detailed information on Placement choices, courses, exams, colleges, admission criteria, eligibility, placement statistics, rankings, reviews, scholarships, latest updates etc as well as by interacting with other ProPlacer users, experts, current students in colleges and alumni groups. We have introduced several student oriented products and tools like Placement Prediction, Knowledge Network, Daily Bytes, Blogs, Community discussion forum, and various Courses.



Fig (6) About Us

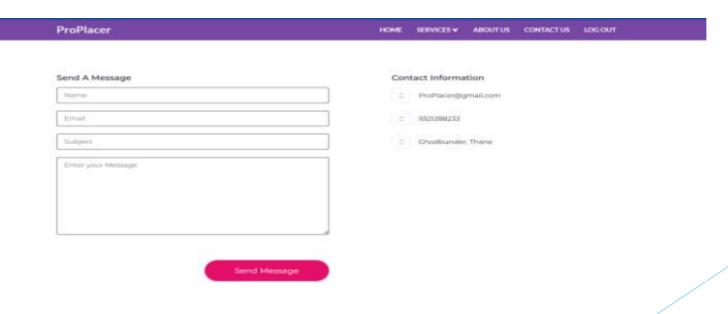


Fig (7) Contact Us

Conclusion

The system that predicts student placement eligibility based on performance offers significant potential for enhancing the placement process. By leveraging student performance data, it provides valuable insights into student readiness for the job market. However, challenges such as limited consideration of soft skills, biases, and lack of adaptability persist within the system. By keep making things better and trying new ideas, the system can help students and companies find the right match for jobs. This will make sure everyone gets a fair chance and leads to success for both students and employers.

References

- [1] Mayur Valte, Shivani Gosavi, Tejaswini Sarode, Ajay Kate, prof. Sagar Dhanake, "Placement Prediction", International Journal of Advanced Research in Science, Communication and Technology.[2022]
- [2] Yashodeep ingale, Tanuja bedse, Shivani Khairnar, Dhayaneshwar Ghute, "Student's Placement Prediction Using Support Vector Machine" using Naïve bayes, machine learning, SVM, KNN, International Journal of Scientific Resaearch in Computer Science, Engineering and Information Technology[2020].
- [3] Mohana Bangale, Shubham Bavane, Akshay Gunjal, Rohit Dandhare, Sudhir Salunke, "A Survey on Machine Learning using Placement Prediction" using machine learning, SVM, KNN, Naïve Bayes" [2019]
- [4] Abhishek rao, Aruna Kumar, Pranav Regi, "Student Placement Prediction Model", A recommendation system Data Mining International Journal of Recent Technology and Engineering [2019].

Thank You...!!