

ALUMNI TRACKING AND INTERACTION PLATFORM

¹Rutik Sudhakar Sarode, ²Sanket Pandurang Shirore, ³Abhaysingh Sunil Deshmukh, ⁴Sidhant Manohar Pagare, ⁵Prof. Kunal Ahire

¹ rutiksarode94@gmail.com, Student of BE. Dept. of Information Technology MET-IOE, Nashik, India

² sanket.shirore@gmail.com, Student of BE. Dept. of Information Technology MET-IOE, Nashik, India

³ abhaysingdeshmukh2002@gmail.com, Student of BE. Dept. of Information Technology MET-IOE, Nashik, India

⁴ sidhantpagare999@gmail.com, Student of BE. Dept. of Information Technology MET-IOE, Nashik, India

⁵ Internal Guide Dept. of Information Technology MET's Institute of Engineering, Nashik, India

Abstract - Alumni connections are important resources that contribute to university evaluation. Even though alumni connections represent networks, they have been mostly evaluated as tabular data (e.g. by providing average salary, employment rate, etc.). This ironically disregards all qualities of a network, from which an alumni network gets its name. It is desirable to evaluate an alumni network as a network, because networks have the potential to provide very insightful information. Evaluation of alumni networks as a network has not been feasible in the past due to data fragmentation (neither universities nor companies willing to share meaningfully significant data in its entirety). Recently the feasibility of such analysis has changed, due to new trends towards democratization of information, accelerated by the Web 2.0 user-generated content phenomenon and crowd-sourcing mentality. Utilizing web-crawlers, we actively harvested data and assembled a dataset on alumni in leadership positions in technology-based industries. Moreover, we included a high proportion of startup companies, which allowed us to evaluate alumni networks with respect to entrepreneurial as well as technology involvement. We show that by analyzing alumni connections as networks, it is possible to uncover new patterns, as well as provide a new way of examining the old.

Key Words: *alumni system, centralized alumni system, alumni networks*

1. INTRODUCTION

The Alumni tracking and interaction platform is a comprehensive software solution designed to streamline and optimize the management of aluminum-related processes within an organization. As aluminum plays a pivotal role in various industries such as construction, automotive, aerospace, and packaging, efficient management of this resource is crucial for maintaining competitiveness and ensuring sustainable operations. The Alumni tracking and interaction platform serves as a centralized platform that integrates and automates key aspects of aluminum-related activities, ranging from procurement and inventory management to production planning and quality control.

One of the primary features of the Alumni tracking and interaction platform is its ability to facilitate seamless communication and collaboration across different departments within an organization. By providing a centralized database and real-time updates, the system enables stakeholders to access accurate and up-to-date information, fostering better decision-making processes. This enhanced transparency also contributes

to improved coordination between various teams, such as procurement, production, and logistics, ultimately leading to increased operational efficiency.

Furthermore, the Alumni tracking and interaction platform is equipped with advanced analytics and reporting tools, allowing organizations to gain valuable insights into their aluminum-related operations. This data-driven approach empowers decision-makers to identify trends, optimize processes, and make informed strategic choices. Whether it's monitoring inventory levels, analyzing production performance, or evaluating supplier relationships, the Alumni tracking and interaction platform provides a robust framework for data-driven decision-making.

In addition to operational benefits, the Alumni tracking and interaction platform also contributes to sustainability goals by promoting responsible aluminum management practices. Through features like waste reduction tracking, energy consumption monitoring, and compliance management, the system aids organizations in minimizing their environmental footprint and aligning with regulatory standards. Overall, the Alumni tracking and interaction platform stands as a crucial tool for organizations seeking to enhance their aluminum-related processes, promote collaboration, and embrace sustainable practices in today's dynamic business landscape.

2. LITERATURE SURVEY

1. Alumni network analysis

The Alumni connections are important resources that contribute to university evaluation. Even though alumni connections represent networks, they have been mostly evaluated as tabular data (e.g. by providing average salary, employment rate, etc.). This ironically disregards all qualities of a network, from which an alumni network gets its name. It is desirable to evaluate an alumni network as a network, because networks have the potential to provide very insightful information. live easy by the solutions emerging with it.

2. Making best use of alumni associations for holistic development of engineering institutes

Nostalgic feelings are very common in human beings. Nostalgic notions have been the main source of many creative works in the field of literature, art and other forms of mass communication. However the 'potential of nostalgia' has not yet been manifested in the field of technology and engineering, especially in the engineering education domain. Based on

personal experiences and some specific incidents, the author proposes a novel idea of capitalizing the 'nostalgia of alumni' of engineering institutions for their holistic development. The paper presents the implementation of the proposed idea through a set of working examples in a teaching department of Cochin University of Science and Technology, namely, Department of Ship Technology, which is the Alma-mater and current office of the author. Various types of activities of the Alumni of the department have been compiled in a systematic way and formed into a 'Role Model' of Institution - Alumni relation entity.

3. Work in progress: Understanding professional competency formation in a service-learning context from an alumni perspective

Engineering educators daily negotiate the formidable task of developing the twenty-first century engineer's competence to enter and thrive in the workplace. With this focus, many have conducted investigations into both what defines such professional competence and how such competence forms within students. In this investigation, we study how professional competence has developed among alumni of Engineering Projects in Community Service (EPICS), as understood through their retrospective perceptions. We are conducting a mixed methods study in order to understand competence development, and this paper presents the design and administration of a survey questionnaire that is informing the qualitative portion of the study. Findings from both aspects of the study will be presented at the conference.

4. Cloud based alumni network for Alumni Database

The Cloud Based Alumni Association website for communication with Alumni encapsulates one of numerous ways how college can keep following with its pass out understudies. Except for communication between college and its pass outs, the Alumni Association System should allow communication between pass outs themselves and their personal presentation in public. The system also should collect actual information about working experience of pass outs students, which can improve faculty credits and teaching process. The aim of this paper is to build an Alumni of Institute online website, it is intended to manage especially the Alumni of college of Engineering with their respective fields. The project manage the fresh as well as old graduate pass outs with their respective information in actively participating in making registering, searching, managing the alumni information for sharing their expertise, network, jobs opportunities and resources. This participation has evolved into multiple dimensions; and is now eager to formally enter into the domain of mentorship to students through a regular program.

3. MODULE DESCRIPTION

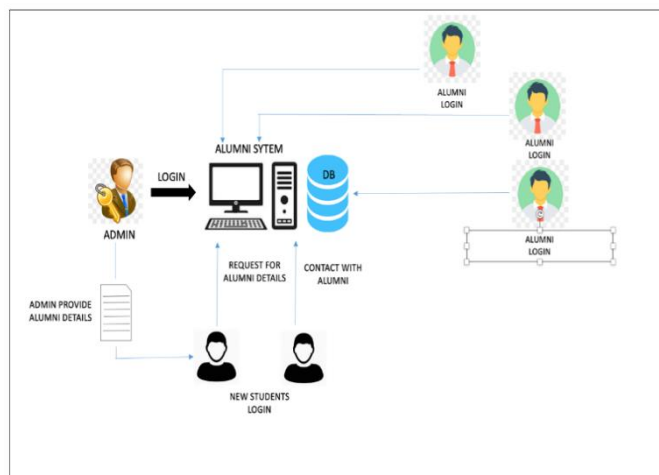


Fig3.1 System Architecture

We are Develop a comprehensive Alumni Management System to facilitate efficient communication and engagement between the educational institution and its alumni. The system should allow alumni to update their profiles, track their achievements, and participate in alumni events, while providing the institution with the tools to manage alumni data, plan reunions, and promote ongoing collaboration. Here are the key components:

1. Data Collection and Pre-processing :

Collect a diverse set of resumes to train and test the model. Sources can include job portals, company databases, and publicly available datasets.

2. Feature Extraction:

Use techniques like TF-IDF (Term Frequency-Inverse Document Frequency) or word embedding's (e.g., Word2Vec, GloVe) to convert text data into numerical vectors. Extract meta-information such as file format, date of creation, and file size.

3. NLP Techniques:

Named Entity Recognition (NER): Identify and classify entities such as names, addresses, and dates.

Part-of-Speech (POS) Tagging: Assign grammatical categories (e.g., nouns, verbs) to words, which helps in understanding the structure of sentences.

Dependency Parsing: Analyze the grammatical structure to understand relationships between words.

4. Machine Learning Models:

Train a model to identify and extract relevant entities (e.g., skills, education, work experience) from resumes. Develop a classifier to categorize resumes into different job roles or industries..

5. Resume Parsing Algorithm:

Design an algorithm that processes resumes sequentially, extracting information in a logical order (e.g., personal details, education, work experience).

6. Keyword Matching:

Implement a mechanism to match extracted information with predefined lists of skills and keywords relevant to the job.

6. CONCLUSIONS

In conclusion, the Machine Learning and Natural Language Processing (NLP) based resume parsing framework for E-Recruitment represents a pivotal advancement in the automation of talent acquisition processes. By leveraging sophisticated algorithms, this framework not only streamlines the traditionally time-consuming task of resume screening but also enhances the accuracy and efficiency of candidate evaluation. The integration of NLP ensures a nuanced understanding of contextual language, allowing for more comprehensive candidate profiling. Ultimately, this framework holds the promise of revolutionizing the recruitment landscape, offering recruiters a powerful tool to efficiently identify and engage with the most qualified candidates, thereby optimizing the entire hiring process.

7. REFERENCES

1. B. Bista, A. Shakya, B. Joshi, A. Pokhrel, L. Dangol, M. Kedia, et al., "An Alumni Portal and Tracking System", Journal of the Institute of Engineering, vol. 16, no. 1, pp. 7-14, 2021.
2. D Lanying, Z Rui, and Q Ling, "A study of impact with donation of local public colleges alumni," in 2nd International Conference on Artificial Intelligence, Management Science and Electronic Commerce (AIMSEC), 2018, pp. 2740 - 2743.
3. J E Sharp, "Work in Progress: Using Mock Telephone Interviews with Alumni to Teach Job Search Communication," in Frontiers in Education. 36th Annual Conference, 2021, pp. 7- 8.
4. J L Huff, W C Qakes, and C B Zoltowski, "Work in progress: Understanding professional competency formation in a service- learning context from an alumni perspective," in 2012 Frontiers in Education Conference Proceedings, 2020, pp. 1-3..

5. 5. P. Babu, G. Deepadharshini, S. D. Priya and A. Janani, "Automated alumni data tracking system", International Journal of Health Sciences, vol. 6, no. S8, pp.1310- 1325, 2022.