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Short Paper

Cultiv8Me.PH – Business and Employment-Oriented Online Service System

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Abstract

Purpose – The project aims to support interns and alumni in their career growth by offering them opportunities to showcase their skills and secure suitable job positions through an application. This app streamlines the tedious process of finding job openings in companies.

Method – The researchers adopted the Scrum development model for its adaptability, teamwork, and continuous development aspects. They assessed system quality using a FURPS evaluation with a Likert scale questionnaire and calculated mean scores using the weighted mean statistical approach.

Results – The web application scored highest in supportability and usability, while the mobile app excelled in supportability, functionality, and performance. Both applications received positive feedback for their user-friendly interfaces and effective functionalities.

Conclusion – The study successfully developed a business and employment-oriented system for the IALAP office, earning high ratings in functionality, usability, reliability, performance, and supportability. Respondents showed strong agreement and satisfaction with both the web and mobile applications.

Recommendations – The study suggests implementing a web API-based notification system, enabling real-time mobile data checking, improving security algorithms, integrating special case support for interns, and utilizing machine learning and AI for Career Path Planning.

Research Implications – This study's results hold significant value for the client, providing valuable data on alumni and facilitating career planning for students and interns seeking job opportunities aligned with their skills and interests.

Keywords – internship, interns, placement, alumni, industry partners

INTRODUCTION

College students typically complete internships as a requirement for their degree. Nowadays, attending an internship has grown in importance because it ultimately improves one's prospects of finding employment after graduation. Students get the opportunity to put in practice the knowledge they have acquired in real-world scenarios through internships. Businesses recruit 70% percent of interns, and students and professionals who have interned are 35% more likely to receive at least one job offer after graduating college, compared to those without work immersion (Boskamp, 2022). Employing interns allows businesses of all sizes and sectors to invest in their future growth and potentially uncover new talent and future leaders–interns provide invaluable support for the company and its current employees (Indeed, 2022).

Given the numerous advantages internships offer to address unemployment for both students and businesses, establishing an efficient system for internship processes would be needed to save time for all stakeholders, improve reporting procedures, and

ultimately assist students in obtaining employment to support a company's business processes. Numerous methods of job recruitment have become commonplace today, and in today's digital age e-recruitment is now among these methods (Kaharuddin et al., 2018).

The department known as the Industry-Academe Linkage, Alumni, and Placement Office (IALAP) is in charge of managing partnerships and alumni relationships for Far Eastern University. Through joint projects and initiatives with its partners in the industry and in academia, IALAP offers opportunities for students, associates, and graduates to get significant practical experience in their area of interest.

The researchers aim to create a system that will aid in the placement process and ultimately provide a modern approach to searching for internship and employment opportunities. In collaboration with the IALAP department, the researchers intend to establish a community of competent and well-rounded professionals for all partner institutions, making greater opportunities accessible for all of our users.

The IALAP department handles the internship of 1200 interns, and with this, the workload easily scales upwards. In addition, separate technologies are employed; data from survey forms still need to be manually encoded into a separate database application. Moreover, interns fill out many documents and send them to the IALAP through email for confirmation, wherein the IALAP manually checks each student's completion status, which floods the IALAP with emails. There is a need to maintain the high employment rate, which would also explain the need to provide support to graduates coming from the list of educational institutions.

Researchers aim to establish a platform comparable to LinkedIn, an American social media site intended for business and employment services and utilize this platform to help in providing support to interns and alumni. The mobile application and website shall have features targeted primarily toward interns, fresh graduates, and alumni users. The target demographic can use the application to find a job that is most suited for them through automatic job matches. For alumni tracing purposes, it will also create reports on user data, including employment status, career trajectory, and whether or not alumni are working in their field of expertise. In a number of systems in similar studies, such a computerized platform or system have been shown to save time in comparison to manual systems (Del Rosario & Dela Cruz, 2022).

LITERATURE REVIEW

Foreign Literature

Aerotek (2018) highlights the role of hiring algorithms in the hiring process, which guide computer output based on predefined rules. Hiring algorithms are increasingly used by hiring managers to streamline the resume screening process. These algorithms are increasingly used by hiring managers to streamline resume screening by identifying

applicants with relevant skills, experience, expertise, responsibilities, software, degrees, certificates, or attributes. Incorporating these keywords in application materials increases the chances of being considered suitable for the job.

Digitization has a significant impact on employment, causing job loss due to automation, but also creating new occupational profiles. This also leads to increased demand for technology-based products and services, as cheaper pricing, new markets, and client groups contribute to the growth of technology-based industries (Mandl, 2021). Online-recruitment platforms have become crucial in modern employment procedures, offering convenient and secure features that cater to user needs (JobStreet, 2021). These platforms have transformed the American labor market, providing greater access to a wider array of job selections and empowering individuals with more freedom in their job search process (Cumming et al., 2022).

Local Literature

The Philippines is experiencing a surge in demand for ICT-related careers, with data scientists and computer programmers being the most sought-after (Bukas, 2021). These professionals are responsible for writing and testing software codes, maintaining and improving programs, identifying technical issues, and preparing software reports and manuals. Other ICT careers in demand include System Analyst, Web designer, Web developer, IT support specialist, and Information Security Analyst.

Local Studies

In the Philippines, there has been an increase in e-recruitment activity for March 2022 (Monster Employment Index, 2022). Factors such as ease of use, perceived usefulness, and overall attitude influencing recruitment officers and job candidates' decisions to use web tools for job applications (Manalo et al., 2021). The perceived usefulness of these tools is influenced by the ease of use, which in turn influences their intention to use or reuse the tools.

A decision support personnel recruiting system (DSPRS) was developed for a Philippine university, a web-based system that can automatically evaluate candidates to improve the human resource department's recruiting process (Erlano-De Torres, 2021). With forty (40) respondents, including university graduates and IT professionals, 32 considered the system suitable for its intended function.

Online recruitment platforms' perceived usefulness significantly impacts job candidates' attitudes towards using the tool (Grimaldo & Uy, 2020). Job seekers believe these tools save time and allow them to compare job openings. However, recruiting officers believe they do not improve work effectiveness or quality, and lack sufficient information for better judgment. They suggest adding additional features to the system to make it more beneficial for recruitment officers. The perceived value of online

recruitment platforms significantly influences job seekers' opinions about utilizing them, whereas hiring managers' sentiments remain unaffected (Manalo et al., 2021). Job seekers believe that internet tools provide them with a range of positions to apply for, saving them time and allowing them to compare job openings. Recruitment officers suggest adding features such as notification of qualified applications, actions taken, and suggestions for subsequent actions to make the system more beneficial for job seekers and hiring managers (Grimaldo & Uy, 2020).

A study by Tapado et al. (2018) suggested providing a job placement program for graduating students as a possible change needed to improve the competitive edge of IT graduates as to their employability. There is a considerable correlation between the skills graduates have learned and their current positions, particularly in the following general areas: communication, human relations, problem-solving, managerial and administrative skills, and technical skills (Quitevis et al., 2019). Another study predicted that the best indicators for a trainee to become employable is Business Operation Discipline, which includes quality work, initiative, judgment, flexibility, collaboration, accountability, punctuality, public relations, workload management, and planning. (Verecio, 2018). In this study, the result also showed communication skills (written and oral) and critical thinking are also essential for future IT graduates to be hired.

The Commission on Higher Education (CHED) emphasizes the importance of HEIs understanding alumni's job opportunities and challenges they face in job search (Luciano et al., 2020). They believe alumni provide valuable insights to address job-related issues such as the imbalance between supply and demand for higher education graduates in the Philippines and the mismatch between graduates' capabilities and industry expectations.

Foreign Studies

Cordova et al. (2020) highlighted the crucial role of alumni in higher education institutions (HEIs) as they offer valuable feedback and support for the university's programs. They highlighted the importance of an information system for quickly generating reports on graduates' destinations, emphasizing the HEI's ongoing role in supporting innovation.

However, alumni tracer studies face challenges in data collection due to manual methods and poor distribution of information (Ardiansyah, 2021). Technology is being used to address these issues, offering features like alumni search, questionnaire filling, report verification, and exporting (Novaliendry & Hakim, 2022; Akbar & Akbar, 2019). In Sucipto et al. (2020), the usability testing of such a system they developed for this issue received a rating of 4.83 out of 5, highlighting its performance and benefits compared to before its integration.

As mentioned, before students become alumni, internships are a crucial part of college degrees, with 35% of graduates receiving at least one job offer post-graduation (Boskamp, 2022). To address internship concerns, various information systems have been implemented, such as the web-based internship information system by Hasti et al. (2019), which provides solutions for issues at every step of the internship process, reducing errors. One such study to find the benefit of such systems suggest that internship information systems are effective, the quality of service being 70%, user satisfaction 71%, profit 70%, among other results (Purnomo et al., 2020).

METHODOLOGY

This chapter provides an overview of the research methodology used for developing the business and employment-oriented online service, including the development process, project design, and testing.

Project Development

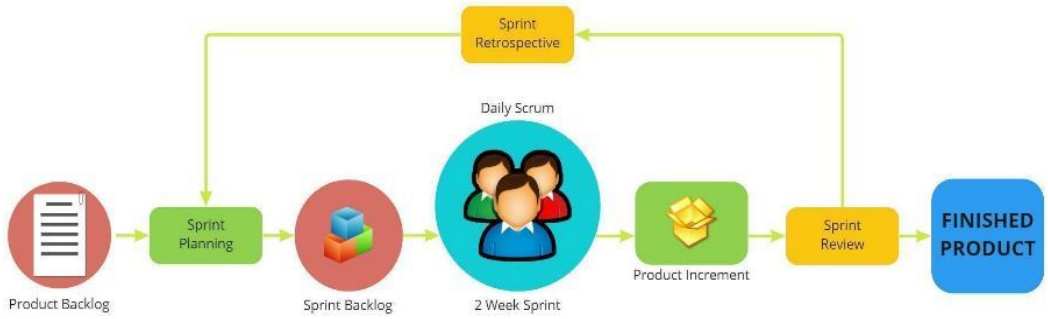

Figure 1. Scrum Process

The researchers utilized Scrum as a development model since it enabled the development team to adapt to changes easily, work as a unit to achieve project requirements, and encourage continuous development (Figure 1). The Scrum development model was deemed appropriate for the project due to potential changes in the development process. It was also considered acceptable based on the organization of backlogs and daily communication among the developers, as well as the reviews and retrospectives that were conducted after each sprint involving all stakeholders.

Project Design

CodeIgniter 3.1.1 framework, MySQL, and PHP were used to create the system's back end. The front-end of the system was created using HTML5, JavaScript, Bootstrap 5.2 framework, JQuery, and Chart.js.

System Testing

The study included alpha testing, beta testing, and user acceptance testing. User feedback was utilized through questionnaires to improve the system quality and generate a polished final output. Specifically, the researchers conducted a FURPS (Functionality, Usability, Reliability, Performance, and Supportability) evaluation using a Likert scale questionnaire to assess system quality.

Statistical Treatment

The researchers used a statistical approach to calculate the mean of the responses they received. Similar to previous studies that evaluated their results using FURPS software testing, the weighted mean was employed to assess the overall efficiency of the proposed solution for the client. In the weighted mean, individual values were assigned weights to represent the relative significance of each observation.

$$\text{weighted mean} = \frac{\sum \text{fx}}{\text{N}} \qquad \textit{Equation 1}$$

In this study, the weighted mean (Equation 1) is computed as shown, where Σ denotes summation, *f* denotes frequency, x denotes the Likert scale value, and N is the total number of respondents. The Likert scale was utilized to interpret the results (Table 1).

Table 1. Likert scale interpretation table

Mean Range	Scale	Interpretation
4.21 - 5.00	5	Strongly Agree
3.41 - 4.20	4	Agree
2.61 - 3.40	3	Neutral
1.81 - 2.60	2	Disagree
1.00 - 1.80	1	Strongly disagree

RESULTS

Figure 2 presents the dashboard designed specifically for interns, offering a comprehensive view of their requirements. It allows interns to access information about their approved documents, those currently for review, and those that are yet to be submitted. This dashboard serves as the primary home page for interns, providing a centralized hub from which they can navigate and access various functionalities necessary for fulfilling their required internship. By offering a clear and organized overview of their progress, the dashboard facilitates efficient tracking and management of internship tasks, enhancing the overall internship experience for the interns.

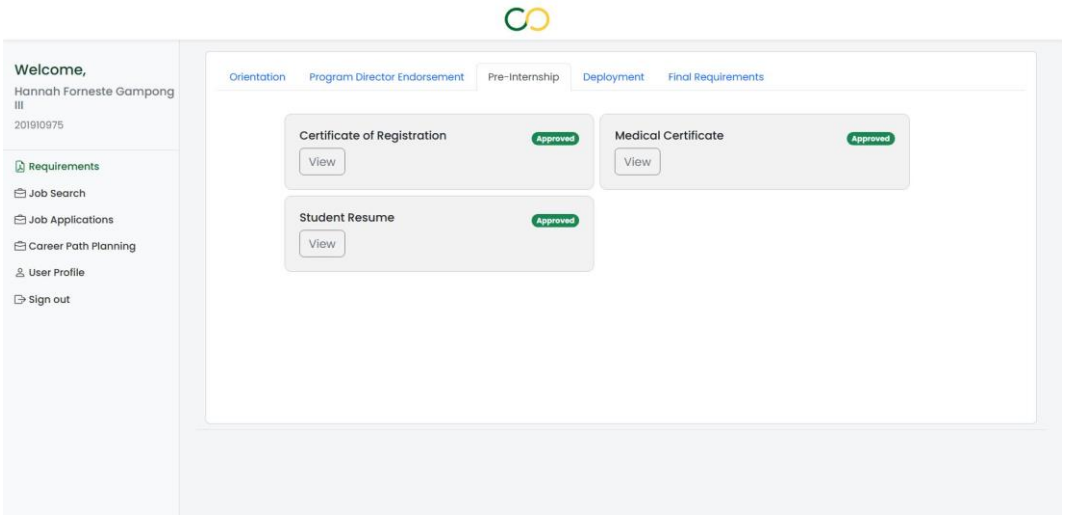

Figure 2. Home Page for Website as Viewed by Intern

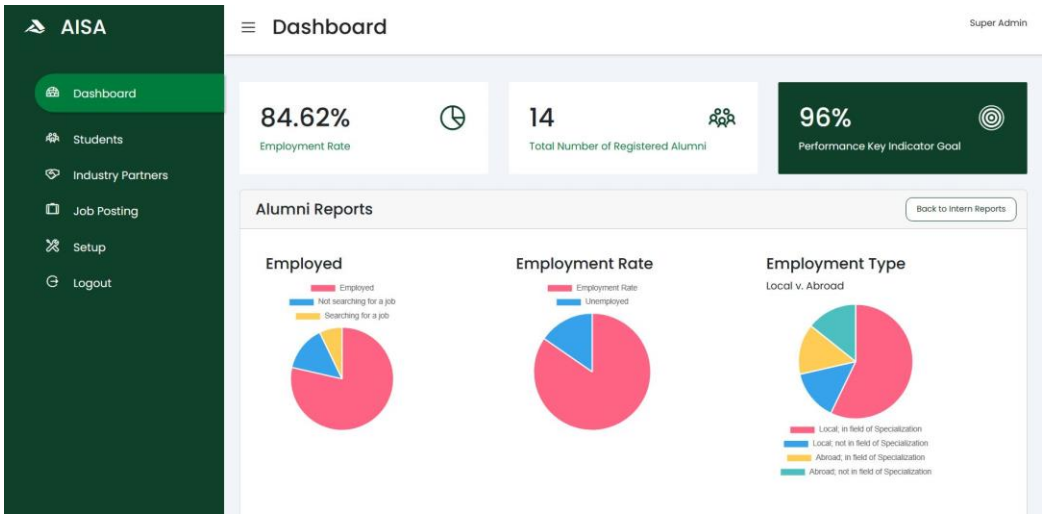

Figure 3. Data Reports Page Displaying a Chart as Viewed by IALAP

Figure 3 showcases the admin side of the system, providing an overview of various reports that present essential data as requested by the client. In this example, this alumni report includes important percentages such as overall employment rate, the percentage of students working in their field of specialization, and the breakdown of workplace locations (local or abroad), among other relevant statistics. The data is presented in both plain text and chart formats, ensuring clear visualization. Furthermore, the top section of the website features the display of the overall employment rate and the Performance Key Indicator, a significant metric that the IALAP strives to achieve. Additionally, the figure highlights the menu sidebar, granting administrators convenient access to data reports and other features.

DISCUSSION

Purposive sampling was used to select respondents for this study, aiming to find individuals who met specific characteristics. The researcher selected members of the population to participate in the data collection process. Specifically, respondents were chosen based on their ability to provide the required information for the development and testing of the proposed system.

Four groups of respondents, IALAP Admins/Coordinator, Incoming Interns, Current Interns, and Alumni individuals from FEU - Institute of Technology, evaluated the system. The researchers provided the respondents with the option to either test the system themselves or view a recording session of recent system demonstrations conducted, before answering the survey questionnaire.

Table 2. Assessment Summary for All Participants for Web Application of proposed system

Criteria	Weighted Mean	Response Description
Functionality	4.51	Strongly Agree
Usability	4.58	Strongly Agree
Reliability	4.51	Strongly Agree
Performance	4.55	Strongly Agree
Supportability	4.63	Strongly Agree
Overall Mean	**4.56**	**Strongly Agree**

Analyzing Table 2 reveals that the system excels in supportability and usability, achieving the highest weighted means with scores of 4.63 and 4.58, respectively. This can be attributed to the system's easy accessibility via web browsers, providing seamless usage across devices. Furthermore, users highly appreciated the straightforward and intuitive interface, making navigation effortless. Overall, the web application evaluation yielded an impressive mean score of 4.56, indicating a consensus of "Strongly agree" among respondents.

Examining Table 3 reveals that the categories of Supportability, Functionality, and Performance received the highest weighted means. While both Functionality and Performance attained an impressive mean score of 4.59, Supportability surpassed them with a mean score of 4.61. Notably, the mobile application's lightweight design and seamless installation on any Android device likely contributed to these exceptional ratings. Moreover, the functionality of the mobile application received high praise as it successfully fulfilled its intended purposes, such as QR code scanning and job listing search. Overall, the web application garnered an average rating of 4.58, denoted by a strong consensus of "Strongly Agree" among respondents.

Table 3. Assessment Summary for Intern and Alumni Participants for Mobile Application of proposed system

Criteria	Weighted Mean	Response Description
Functionality	4.59	Strongly Agree
Usability	4.57	Strongly Agree
Reliability	4.56	Strongly Agree
Performance	4.59	Strongly Agree
Supportability	4.61	Strongly Agree
Overall Mean	**4.58**	**Strongly Agree**

CONCLUSIONS AND RECOMMENDATIONS

The researchers gathered minor feedback towards the constraints accompanied by the whole internship process and took a step forward to progressing towards the overall difficulty of eventually applying for job listings as a fresh graduate, moving headfirst towards the industry without any prior experience but the internship program. The proponents were able to pinpoint the overall issue of manually tracking interns and alumni, which stems from the lack of manpower catering to many students. To address the concerns of all beneficiaries the research teams along with their adviser and mentors formulated a means to address each evident concern within the confines of the community. The proponents of the system were able to assess and analyze the possibility of establishing the proposed system by providing a FURPS based metrics towards all beneficiaries of the proposed system to gain their feedback and assessment towards the initial stages of development. In line with this, the researchers deemed it necessary to be guided with the following specific objectives to properly move towards addressing the difficulties and problems associated with deployment, employment and alumni tracking hardships, listed are the following specific objectives of the project:

To Develop an Effective Internship Module for the IALAP Department

The internship module was intended to provide a platform in which all incoming intern users are given a straightforward approach towards the overall process of going through internship. The effectiveness of alleviating a significant level of procedural constraints towards not only the users is established, but it may also contribute to the delivery of services. Furthermore, a composite mean score of 4.47 supports the functionality and a composite score of 4.48 supports the reliability of the system.

To integrate Job Functionalities towards the overall system

This module provides incoming interns with a variety of features like preference-based job listing and allows them to endorse companies. This feature gained a mean score of 4.35 in the survey under the cluster of functionalities for interns and alumni, and the overall composite score for all functionalities was 4.47. This is equivalent to a

response of strongly agreeing with the notion of the effectiveness of all functions, particularly deployment and employment-related functionalities.

To Develop a Career Path Planning Module

This module aims to provide a self-assessment of the current standing each user participant has regarding his soft and technical skills via means of assessment. According to the survey conducted, all respondents gave this module a score of 4.29 which signifies that the respondents were able to assess their career prospects and effectively record their progress toward their chosen field.

To Create Alumni Network Module

This allows the alumni relations coordinator to track and assess all the users' employment details with the aid of forms that are provided for each alumni member who will be availing of the service. It can be noted that based on the survey provided the composite mean score in which this is included in receiving a score of 3.56 which signifies that the admins consider this process as compliant with their needs.

To Develop a Report Module

In compliance with the IALAP's ISO auditing requirement and goal to achieve a significant percentage for their key performance indicators, the system gathers data from all transactions and status that each target user (Intern and Alumni) shares towards the overall system. It is to be noted that the composite score for Admin functionality is at 4.56 which signifies good compliance towards their functional needs.

To Develop a CRUD Module for the IALAP Department

Admin users for each faction of the IALAP Department may edit, add, view, and delete information that is well beyond their range and is effectively audited through authorization indicators. Admins are given the capability to gain control of everything that is laid out for them to accomplish their tasks. With the survey provided to the admin, it is good to note that they provided a composite score of 4.56 for the main function that clusters this functionality.

To Construct a Login and Registration for incoming Interns and Alumni

This module aims to allow incoming interns and alumni to log in and register towards the proposed system. Many participants gave the login for web users a mean score of 4.44, which signifies a response of strongly agreed. This would entail that this module is considered a success as referenced from the survey conducted.

RESEARCH IMPLICATIONS

The focus of this study is to provide valuable exposure to job opportunities that are best suited for individuals, yielding significant implications for various stakeholders. The Industry-Academe Linkage, Alumni, and Placement Office (IALAP) will benefit from comprehensive reports and data regarding the career performance of alumni from educational institutions such as FEU Alabang, FEU Diliman, and FEU Tech. This information will offer insights into how graduates fare in their respective fields and aid in understanding the prospects of upcoming graduates.

Students and alumni from these institutions will now have a platform that facilitates career path planning, helping them visualize potential opportunities amid the challenges posed by the pandemic. This platform aims to enhance deployment and employment probabilities by matching users with preferred requirements specified by companies and assisting interns in managing their required documentation.

Furthermore, the findings of this study hold implications for future researchers, guiding them in their research and development endeavors related to deployment, employment, and business-oriented platforms.

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DECLARATIONS

Conflict of Interest

The researcher declares no conflict of interest in this study.

Informed Consent

Not applicable.

Ethics Approval

Not yet applicable.

REFERENCES

Aerotek. (2018, December 20). *What hiring algorithms mean for job searchers like you*. Www.aerotek.com. https://www.aerotek.com/en/insights/what-hiring-algorithms-mean-for-job-searchers-like-you

Akbar, R., & Akbar, M. (2019). E-tracer study based on expert systems (A case study at Amik Indonesia). *EPH - International Journal of Science and Engineering*, *5*(2), 13–18. https://doi.org/10.53555/eijse.v5i2.89

Ardiansyah, T. M. (2021). Web-Based Abulyatama alumni information system. *International Journal Education and Computer Studies (IJECS)*, *1*(2), 38–42. https://doi.org/10.35870/ijecs.v1i2.600

Boskamp, E. (2022, January 11). *18 internship statistics [2021]: Data, pay, and trends*. Retrieved from Zippia, https://www.zippia.com/advice/internship-statistics/

Bukas. (2021, September 6). *7 In-Demand ICT Careers in the Philippines*. Retrieved from Bukas.ph, https://bukas.ph/blog/7-in-demand-ict-careers-in-the-philippines/

Cordova, R. S., Maata, R. L., & Epoc, F. (2020). A model and framework for alumni tracking and information system. *International Journal of Advance Computational Engineering and Networking (IJACEN)*, *8*(6), 49–53.

Cumming, C. S., Bahn, K., & Zickuhr, K. (2022, February 2). *How new job search technologies are affecting the U.S. labor market*. Equitable Growth. https://equitablegrowth.org/how-new-job-search-technologies-are-affecting-the-u-s-labor-market/

Del Rosario, M. J. N., & Dela Cruz, R. A. (2022). Internship program management information system with lean management. *International Journal of Information and Education Technology*, *12*(1), 7–14. https://doi.org/10.18178/ijiet.2022.12.1.1580

Erlano-De Torres, J. A. (2021). Implementation of decision support personnel recruitment system for Laguna State Polytechnic University-San Pablo City Campus. *International Journal of Managing Information Technology*, *13*(03), 45–63. https://doi.org/10.5121/ijmit.2021.13304

Grimaldo, J. R., & Uy, C. (2020). Factors affecting recruitment officers' intention to use online tools. *Review of Integrative Business and Economics Research*, *9*(1), 194–208.

Hasti, N., Lesari, S., & Gustiana, I. (2019). Web-Based internship information system. *IOP Conference Series: Materials Science and Engineering*, *662*. https://doi.org/10.1088/1757-899x/662/2/022090

Indeed. (2022, June 14). *What are the benefits of interns and why do companies hire them?* Indeed Career Guide. https://www.indeed.com/career-advice/career-development/why-do-companies-hire-interns

JobStreet. (2021, November 29). *E-Recruitment Platforms 5 Benefits Jobseekers Must Know*. Career Resources. https://www.jobstreet.com.my/career-resources/job-hunting/e-recruitment-platforms-5-benefits-jobseekers-must-know/

Kaharuddin, I. W., Pangemanan, S. S., & Rumokoy, F. S. (2018). Analyzing employees' perception of traditional and modern recruitment. *Jurnal EMBA*, *6*(4), 3583–3592.

Luciano, R. G., Alcantara, G. M., & Bauat, R. (2020). Design and development of alumni tracking system for public and private HEIs. *International Journal of Scientific & Technology Research*, *9*, 12–19.

Manalo, R., Grimaldo, J., & Uy, C. (2021). Utilization of e-recruitment tools as perceived by recruiters and job applicants. *Luz Y Saber*, *14*(1 & 2), 53–64.

Mandl, I. (2021, December 15). *Employment impact of digitalisation*. Eurofound. https://www.eurofound.europa.eu/data/digitalisation/research-digests/employment-impact-of-digitalisation

Monster Employment Index. (2022, March). *March 2022 Index highlights. Monster Employment Index | Analysis of Online Job Demand | Monster Philippines*. Monster. https://www.monster.com.ph/employment-index/

Novaliendry, D., & Hakim, N. U. (2022). Development of A tracer study information system in Senior High School with Devops method using Python application and Django framework. *Jurnal Teknologi Informasi Dan Pendidikan*, *15*(1), 96–104. https://doi.org/10.24036/jtip.v15i1.586

Purnomo, E., Pratama, Y. R., & Rezani, R. (2020). The effectiveness of internship information system application in vocational high school. *Journal of Physics: Conference Series*, *1446*(1). https://doi.org/10.1088/1742-6596/1446/1/012032

Quitevis, C., Lopez, F., Binay-An, I., & Sanidad, R. (2019). Tracking the alumni of the graduate school in a Philippine higher education institution. *Asia Pacific Journal of Multidisciplinary Research*, *7*(3), 65–71.

Sucipto, S., Dewi, E. K., Resti, N. C., & Santi, I. H. (2020). Improving the performance of alumni achievement assessment by integrating website-based tracer study information systems and Telegram API. *TEKNIK*, *41*(1), 72–77. https://doi.org/10.14710/teknik.v41i1.25307

Tapado, B. M., Acedo, G. G., & Palaoag, T. D. (2018). Evaluating information technology graduates employability using decision tree algorithm. *Proceedings of the 9th International Conference on E-Education, E-Business, E-Management and E-Learning - IC4E '18*. https://doi.org/10.1145/3183586.3183603

Verecio, R. L. (2018). Predicting employability skills among Information Technology graduates of Philippine State University in their on-the-job training using J48 algorithm. *Indian Journal of Science and Technology*, *11*(37), 1–6. https://doi.org/10.17485/ijst/2018/v11i37/130842

Author's Biography

Krystaleen G. Boongaling is a dynamic individual with a passion for continuous learning. With a solid background in web development and project management, she has successfully contributed to various web applications throughout her academic journey. Her commitment to excellence earned her recognition as a top-performing student and a President's Scholar at FEU Institute of Technology. She stays updated with industry standards and holds certifications in SAP S/4HANA Portfolio and Project Management and IT Specialist-Databases. Her dedication, technical proficiency, and leadership make her a valuable asset in any field.

John Vincent M. Del Rosario possesses exceptional leadership skills and a natural ability to captivate audiences, making him highly effective in impressing prospective clients and effectively communicating meeting outcomes to his team. With a solid background in web development, he has made significant contributions to a variety of web and mobile applications, showcasing his proficiency in Laravel, CodeIgniter, React, and other cutting-edge technologies. As a top-performing student at FEU Institute of Technology, JV is fueled by an unwavering commitment to excellence. Keeping up with industry standards, he holds a range of certifications, including IT Specialist certifications in HTML and CSS, as well as Databases, ensuring his expertise is up-to-date and primed to make a lasting impact in the dynamic realm of web and mobile application development.

Hannah Isabel F. Gampong is a highly skilled and versatile individual with a strong background in web development, with proficiency in PHP technologies like CodeIgniter and WordPress development, and in quality assurance through automated testing frameworks like Cypress. Her commitment to excellence and innovation has been recognized by being a consistent awardee of FEU Institute of Technology as one of its Top Performing Students. Hannah's passion for learning is evident in her extensive certifications, including CyberOps Associate, CCNA, and IT Specialist in Databases, and HTML and CSS.

As a developer of online and mobile applications with a wide variety of knowledge, Christian Paul P. Mendoza is a highly skilled programmer. With proficiency in React, Python, Oracle Database, MySQL, and various web technologies, he possesses a versatile skill set that enables efficient development across different platforms. Moreover, his commitment to continuous learning is evident through certifications in IT Specialist - Databases and JavaScript, further strengthening their expertise. With a passion for creating innovative solutions, he is poised to make a significant impact in the field of web and mobile application development.