

Research Article

An Intelligent Scheduling Model of Computer Human Resources in Complex Scenarios Based on Artificial Intelligence

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Received 13 January 2022; Revised 28 January 2022; Accepted 3 February 2022; Published 27 March 2022

Academic Editor: Narasimhan Venkateswaran

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Human resource allocation in any organization is still a challenging process as the candidate should meet the requirement of the organization's needs and skills. During the traditional period of human resource allocation, the employer is able to meet the candidate and perform communication directly to analyze the candidature. Though this process is preferred by most organizations, the organizations were facing difficulties during the complex scenarios. In those circumstances, human resource allocation can be overcome by implementing artificial intelligence with the support of terrestrial wireless sensor network. The combination of these two technologies will make the easy communication among the employers and the employee, as like the traditional system. In this study, Fordful Carson Method (FCM) is implemented for the human resource allocation schedule by using intelligent networking system. The proposed model is compared with the existing Adam model for the resource scheduling and observed that the proposed model has obtained 99.12% of accuracy in resource scheduling.

1. Introduction

Two parts of business intelligence, managerial intelligence and equipment automation, are progressing quickly in tandem with the development of artificial intelligence technologies [1]. Human resource management is becoming an increasingly important part of management intelligence [2, 3]. A company's ability to grow talent in the field of enterprise, improve management style, and increase total resource utilization is considerably aided by efficient human resource management. This strengthens the company's overall integrity as well as its worth in terms of both economic and social considerations. As a result, it is imperative for firms to employ sophisticated and effective human resource management [4]. Human resource management practises are no longer sufficient to meet the massive data processing demands of the intelligent era. An HR management system that lacks the ability to properly analyze and deploy the company's manpower data wastes a large amount of data collected by various information systems [5]. As a result of this situation, there are losses in information resources and

a slowing of intelligent data processes. To meet this challenge, artificial intelligence algorithms, which can significantly increase the processing capacity of firm human resource data, are required to meet this challenge [6].

Data mining is at the very core of all data processing. Data mining is a term used to describe the process of extracting relevant information from large amounts of data using software tools. With small amounts of data, statistical approaches can be applied, but when dealing with large volumes of data, statistical methods are less adaptable [7]. Machine learning is one of the most frequently used techniques for uncovering data's hidden properties. With the use of these qualities, more precise data extraction can be achieved. Future development and operational laws are studied in order to estimate and analyze the pattern of change in various aspects [8]. Forecasting is the process of predicting what the future holds. There are times when a model of the real world (object) is needed to achieve this purpose, and the term "modelling" refers to mimicking or abstracting the real world (object). Foretelling what will happen in the future is possible only if you know what will happen in the here and now, which is why it is important to study everything that exists and moves [9]. From an information flow standpoint, reality is simultaneously the future and itself. As a result, a "good" model should not only accurately reflect the current state of events but also accurately foresee the future. As a result, a mathematical model must be developed to predict the future based on objective data [10].

Starting with an organization's established goals, development plans, and tasks, a human resource planning activity called "human resource demand recommendation" takes into account various internal and external factors in order to forecast the quantity, quality, and structure of human resources that an organization will need in the future [11]. It is not possible to accurately simulate human imagination with traditional mathematical modelling methods, but neural networks can do so, and they can also discover the characteristic relationship between input and output (human resource requirements) through the learning and memory association of historical information [12]. Explanatory factors in historical sample data can be used as input units in the artificial neural network, and the output units are created after the neural network's implicit layer weights, and activation functions are applied to the neural network [13]. Weights for the neural network are chosen to minimise the sum of squares difference between desired output and actual output, i.e., the goal function is determined. Multisample learning, which adjusts weights based on past data and lowers variances, can be used to add new known explanatory factors into a neural network and predict values through the implicit layer [14]. An important part of artificial intelligence is the use of machine learning. Machine learning uses complex algorithms to generate mathematical models from a sample set of data. The more data that is fed into the algorithms, the more intelligent the machines become. Without being specifically taught how to do something, the models are improvising. Reward-based learning is an example of machine learning. To train a programme using supervised learning, it is given a predetermined collection of instances. When new data is introduced, a correct conclusion can be drawn from this information [15]. This type of learning is called "supervised learning," since we know what we want the computer to generate and we use a predetermined answer to evaluate the program's conclusions. Once the software has achieved an acceptable degree of accuracy, the learning process can be terminated.

In this case, a computer would be asked to find the blue pickup truck in a collection of images of cars. In unsupervised learning, we give the computer a vast amount of data and tell the software to sift through that data in order to uncover the patterns that are buried within it [16]. The properties of this data are then used to sort it into several categories. Google's news algorithm is an example of unsupervised learning. Science and technology, business, and finance are just a few of the topics covered by this service. In the end, we have reinforcement learning as a sort of machine learning. Reinforcement learning is a technique for teaching a computer new skills by having it interact with the real environment [17]. It learns from its experiences in the real world and continually improves in order to achieve the set goal. Teaching chess to a computer is a good example of reinforcement learning. It will lose in the beginning, but through learning from its mistakes, it will finally become unbeatable. The usage of artificial intelligence (AI) in HR is expanding, and the trend is expected to continue [18]. Powered by artificial intelligence, AI-enabled technologies are revolutionising human resources and improving the quality of HR interactions. Having a basic understanding of the terminologies now, let us move on to the various HR segments and how AI may be used by HR.

As far as most people are concerned, AI is used for screening candidates. Artificial intelligence (AI) technology has had a significant impact on practically every area of recruiting. From the creation of job descriptions to the selection of candidates [19], artificial intelligence (AI) is helping HR departments identify a varied pool of eligible employees. Every hiring funnel's purpose is to maintain a consistent stream of applicants. Using AI-powered tools, you may discover these issues in your writing and recommend improvements that will improve your overall posting. For each job posting, actual market data is mined from the thousands of advertisements that have already been made, and they figure out what is working to attract the best people and cut down on application times for each position [20]. A job description can be matched to a candidate's online behavior, interests, and location using AI to help HR locate the most qualified worker for the position. Programmatic advertising channels can then be recommended by artificial intelligence, which can subsequently offer hypertargeted ads when those people go online. Candidates can get help from chatbots during the application procedure [21]. For each position, the software can generate questions that are tailored to the candidate's resume. Training the chatbot to provide tailored updates and feedback, as well as suggestions for the next steps, can benefit both the business and the candidate. Using machine learning, the AI chatbot may call a human recruiter and use that information for future interactions when it does not have the answer [22]. Human resource management has become increasingly important in today's highly competitive business environments. Employees and positions should be matched as closely as possible through human resource allocation. The distribution of human resources has a direct impact on the efficiency of the company's other resources [23]. When it comes to long-term success and rapid expansion, a company's capacity to successfully manage its human capital is a key determinant. By forecasting the human resource requirements of modern organizations, it is possible to provide exact guidance for the allocation of human resources, which has farreaching implications for the long-term development of firms [24]. Increasing the productivity of an organization's human resources is made possible by the proper distribution of human resources throughout the company [25]. Overall operational efficiency and the generation of additional economic and societal benefits are the ultimate goals for which a company allocates its human resource budgets. Various cloud-based HR information systems are now concentrating on decision support capabilities and

research into ways to better match internal workers with job requirements by utilizing current HR data. Additionally, a data-driven strategy such as this one can provide scientific backing for the best allocation of human resources [26]. Conventional mathematical modelling depends on socioeconomic politics and technology to model an organization's human resource structure. A recurrent neural network with high nonlinear learning and pattern recognition abilities can be used to illustrate the relationship between the structure of human resources and the factors that influence it [27]. Neural networks are widely used in financial forecasting, managerial decision-making, and process control. To overcome the constraints of market research, new two-loop neural network models and algorithms based on the expertise of neural network applications in other disciplines are needed. Planned personnel resources are mostly determined by assessing the organization of the unit's workforce and determining the link between job requirements and employee competencies. A person's quality score is calculated by weighing and adding their varied competencies [28]. This study focused on determining the intelligent scheduling model of human resources in a complex environment using wireless sensor networks.

2. Materials and Methods

The dataset used in this study includes human resource requirements for stores of same organization under various departments is considered that will include the information about the real datasets for analysis.

2.1. Motivation of the Work. The human resource allocation using the Fordful Carson Method for human material is an essential aspect of the critical and most considerable planning and analysis process. This study investigated a human resource allocation framework artificial intelligence based on neural networks. The human allocation of resource framework based on Petri net is applied in this paper, along with the characteristics of human resource optimization, human resource transportation, multithreading, and observable classification attributes. The specifications in the framework and the classifier are trained on the human resource information. Finally, the simulation result surface effects are analyzed. According to the study results, the ordinary predictive performance provides an accuracy rate greater than 80%. The Fordful Carson Method's population growth could boost the accuracy rate. The population growth using the Fordful Carson Method could increase the accuracy rate. It will be most effective whenever the quantity of information is related to the human resource management. As a result, this system could also provide an efficient and accurate allocation of candidates using small and midhuman resource management.

2.2. Proposed Architectural Model. The employer's traditional way of recruiting an employee will have some tedious procedures to be followed. However, most organizations were comfortable with the conventional human resource allocation, as it supported real-time face-to-face interaction with the candidate and was able to allocate much time for the candidates. But these advantages are not suitable in all the circumstances. During the allotted schedule, if the candidate faces some unavoidable situation, he may miss the chance of resource allocation. Also, it is still more challenging to meet the persons during complex scenarios. Hence, the traditional human resource allocation process slowly replaces recent technological advancements. The replacement is performed with artificial intelligence and terrestrial wireless sensor network technologies (Figure 1).

For these upgrades, the datasets considered are real, process, and simulated data. The real dataset will hold the data about the budget or requirement of employers in any given organization. The details such as duration of employment, projected salary, and number of employers required each day depending on every department are maintained in the database. In the case of the processed dataset, details about the necessary skill sets of the candidate, training required for the candidate depending on the skill set are projected. At the same time, the last case of simulated data contains the information about the status of the organization and immediate requirements for the candidate and the related information. All this information is stored in the primary database equipped with intelligent technology. When there is a primary requirement for human resources, the smart data system can be approached to analyze the available data. Later to the analvsis, it will project the report to the organization's employees. When an employer notices the need for human resources, each candidate may be available at different locations and treated as individual nodes. The database which maintains the complete databases is treated as the base station. During the complex scenarios, the human resource allocation is performed with internetworking support. This internetworking plays a significant role in this resource allocation. In this research, challenges such as network stability, video and audio clarity without delay, and insecure communication are assumed to be unavailable. If these challenges were overcome, this model would suit both employers and employees in time management and cost. In some scenarios, the employee can be given chances to work from the remote location but with timely delivery of the assigned task. Under these circumstances, Internet should be available without any restrictions and delay which will aid the employee to be approachable whenever the employer needs.

2.3. Proposed Work. In the text, the term "human resource allocation," also recognised as "flow at work," is used to define this cognitive process in order to encourage human resource allocation. It incorporates the interaction effect of testing capabilities but also motivation-oriented, as well as the mediating impact of human allocation of resources sense and also the mediating effects of ability. The human resource allocation framework that effects employee behavior by stimulating interest and motivation is not so much more protracted than for other connections, but it is also the current tendency of the humanistic resource management era. Employees with a multidimensional behavior who are engaged in exploration and production work at that time are considered for the analysis. Independent human allocation of resources is a term used in the area of technology.



FIGURE 1: Architectural diagram of the proposed system.

Research is based seeks new knowledge, discovers new possibilities, but rather develops new technologies, whereas extractive innovation seeks to consolidate and improve existing capabilities.

Human resource allocation used for Petri net is known as transaction in just about any firm remains a difficult procedure since the candidate must satisfy the needs and competencies of the organization. During the typical time of human resource allocation, the employer is allowed to meet the candidate and conduct direct dialogue in order to evaluate the candidate's qualifications.

These skills are the significant quality basic foundation for employees that participate in Petri human x allocation of resources. M is function methodology and Petri net model; there are many components in a Petri net, including place and transition that are specified as in the following Equation (1).

$$M = x \sum_{i=1}^{x} \sum_{j=1}^{x} g_{ij}(n_i - \bar{n}) (n_j - \bar{n}) + \{M1, M2, \cdots ..mx\}.$$
(1)

The transmitter and g_{ij} the receiver must be different from the other two, and the operator can indeed be actually connected to the required device without dispute. Transition $n_i - \bar{n}$ is classified into instantaneous transition and time change. Space time transformation, such as the previous MX, that takes some time to follow the sequence is represented in the Equation (2). In most firms like this procedure, nonetheless, the organizations encountered difficulty with complex cases. In such cases, human resource allocation can also be avoided by applying artificial intelligence with assistance of a wireless sensor network.

$$MX = \sum \frac{x \sum_{i=1}^{x} \sum_{j=1}^{x} g_{ij}(n_i - \bar{n}) \left(n_j - \bar{n}\right)}{\sum_{i=1}^{x} \sum_{j=1}^{x} g_{ij}(n_i - \bar{n})^2}.$$
 (2)

The following Equation (3) represents the change in the transition time.

$$MX = \sum \frac{x \sum_{i=1}^{x} \sum_{j\neq 1}^{x} g_{ij}(n_i - \bar{n}) (n_j - \bar{n})}{D^2 \sum_{i=1}^{x} \sum_{j=1}^{x} g_{ij}}.$$
 (3)

Then, Equation (4) deals with counting of the number of information to transaction based on the time sequence.

trans =
$$\sum_{i=1}^{j} \frac{\sum_{j=1}^{q} \sum_{d=1}^{q} \sum_{u=1}^{q} \sum_{y=1}^{x_d} \left| s_{ij} - s_{dy} \right|}{2x^2 t}$$
. (4)

The different kinds of *A* number of statements related to the data items can indeed be depicted by places and transitions, and also, $s_{ji} - s_{dy}$ the number of data can indeed be $t_j + t_d$ represented by focused arc weights; according to the following Equation (5), the Petri net description is as follows.

$$petri_{jd} = \frac{\sum_{A=1}^{d_j} \sum_{y=1}^{x_d} |s_{ji} - s_{dy}|}{x_j x_d (t_j + t_d)}.$$
 (5)

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The Petri net-based code behavior procedure is explained in the following Equation (6) which provides the orientation for the action sequence in Petri net and represents the same type of transformation as in correlation between the different object classes in a given statement. This transformation along with the weight of oriented action sequence represents the different types of data items in a given declaration.

$$M_{sm} = 1 - \sum \frac{(2\vartheta_n \vartheta_s + B_1)(2\tau_{ns} + B_2)}{(\vartheta_n^2 + \vartheta_s^2 + B_1)(\tau_n^2 + \tau_s^2 + B_2)}.$$
 (6)

An *L* Petri net-based modelling method for code influence on the performance of h_i Petri net-based code behavior modelling method is clarified; also, the v_q correlating relationship among *q* Petri net components but also code components is constructed as follows:

$$L\left(h_{i},g_{j}\right) = L(h_{i})L\left(\frac{g_{j}}{h_{i}}\right); L\left(\frac{g_{j}}{h_{i}}\right) = \sum_{q=1}^{q} L\left(\frac{g_{j}}{v_{q}}\right)L\left(\frac{v_{q}}{h_{i}}\right), \quad (7)$$
$$l_{q} = \sum_{q=1}^{q} \frac{2q}{q+1} + \left[\frac{1}{2} + \frac{1}{2q}\right]\left[\frac{b_{2} - b_{1}}{3}\right]^{2} + \frac{2(b_{2} - b_{1})}{3}. \quad (8)$$

To accomplish the $b_2 - b_1$ evolution from rules to Petri net, the static code analysis technique is being used to analyze and process the executable as in the following Equation (8).

$$B_{jd} = \int_{0}^{\infty} hE_{j}(s) \int_{0}^{s} (s-n)hE_{d}(n).$$
(9)

A s - n single program document provides an associated operation hE_j a given input object set that has been processed, and a B_{jd} digital output object that has been produced as a result is given in Equation (9) for the process.

$$\ln\left(\frac{M_{iu}}{M_{iu}-1}\right) = \alpha + \beta \ln M_{iu} - 1, \qquad (10)$$

$$\sum_{n=1}^{\theta} Zn * l = \frac{\sum_{n=1}^{\theta} (((G + (Y_i/\sum_{1}^{x} G_{\varepsilon}))/B) + Y + Yb)}{\beta + \alpha \ln M_{iu} + (L/B)}.$$
(11)

Equation (10) has a set of technicians that are represented by M_{iu} ; this same $\alpha + \beta$ set of incoming signal data objects is represented by ϑ , and the sequence of digital output objects is represented by G_{ε} . Zn * l is the declaration given for the input object *l* conforms to the procedure *Y* information data object, and the declaration is extended as the data object o equates to the procedure $\sum_{n=1}^{\theta} Zn * l$ that extended data object also with utmost priority, following the sources of Equation (11).

$$\ln \text{ petri}_{iu} = r_0 + r_1 ht * hu + \sum_{i=1}^{X} c_j N_t + \varepsilon_t, \qquad (12)$$

$$\int (r) = \sum \frac{1}{Xd} \sum_{i=1}^{X} q\left(\frac{N_i - n}{d}\right).$$
(13)

Because the $r_0 + r_1$ activity of the original statement should always be ht * hu represented in the final outcome of the homework operation, variable is chosen as the final output object. The ε_t process of altering the amount and types of information items could be easily summarized as in Equation (12). The transformation of $\int (r)$ process from input data object to output object can be represented in Petri net is given in Equation (13), and $\sum 1/Xd\sum_{i=1}^X q((N_i - n)/d)$ represents that the transformation process from input data object to output object is represented by the direction and weight of the input/output action sequence of declaration transformation.

3. Results and Discussion

Human resource allocation is used to describe human resource management. Figure 2 represents framework allocation using the questionnaire based for implementation. It is used to develop for the online scenario; it is used to stimulate Petri human resource allocation, including the interactive effect of testing ability and motivation-oriented Petri orientation. The mediating effect of human resource allocation sense and the moderating effect of opportunityoriented Petri orientation are analyzed. As motivation scholars have emphasized, intrinsic motivation is more durable than extrinsic motivation.

The Petri human resource allocation system that influences cost behavior by stimulating intrinsic motivation is not only more long term than other paths but also the general trend of the era of human resource management. The proposed Fordful Carson Method (FCM) for the human resource management through intelligent networking is compared with the existing algorithms, such as Numerical Algorithms Group (NAG), Adagrad, Root Mean Squared Propagation (RMSProp), Adam, and Nadam. From the graph, it can be observed that the proposed algorithm and the existing algorithm Nadam are providing equivalent results in the allocation process through the intelligent terrestrial wireless networking technology. Hence, the model have to be modified or improved to get improved performance than the existing algorithm.

From Figure 3, we can observe that various abilities are involved in human resource allocation with the support of inspiration. Equal chance software tools could affect user resource allocation used in the network. This challenge can be overcome for Internet use, and the internal cognitive online mechanism is one route to be followed. Furthermore, this effective process should not be implemented all at once but consider the method and the influence level. For illustration, the mediating effect of environment and correlation is frequently discussed in the literature on results shows high, implying invitation to human resource training. Other research, including online tests, discover that establishing rewards and other incentives enhances its willingness for special problem obligation to correlate skills and ability to play its efficiency. It also suggests the difficulties and skills



FIGURE 2: Performance cost analysis of human resource management framework allocation using various methods.



FIGURE 3: Intelligent scheduling model of computer human resources in complex scenario iteration update time(s).

have to be considered during the utilization of human resources besides the timely completion of the process. As the number of iterations of human resource allocation is getting increased, the time taken for completing the process is reduced (refer Figure 3). This process suggests that the frequent access of network resources by the nodes will make the route be available for prolonged duration.

Human resource allocation (see Figure 4) following candidate training may increase innovators' willingness to discover exciting technologies. The willingness will also be



FIGURE 4: Performance analysis human resource management training accuracy validation accuracy.



FIGURE 5: Performance analysis human resource management training loss validation loss.

focused on the work process, allowing them to intentionally balance the work to avoid the stress caused by excessive investigation or frustration caused by rapid growth. Furthermore, the FCM framework-based human training resource allocation tool (wireless network) validation accuracy could play a variety of roles in management. From this figure, it can be observed that the accuracy rate during the training and the testing process is equivalent till 50th iteration. Later, the deviation in the accuracy can be observed. The reason for deviation in accuracy of human resource allocation during testing is may be due to network delay, poor noise signal ratio, poor audio or video quality, and much more. In Figure 5, the human allocation for the training resources may decrease innovators' desire to explore exciting technologies while still focusing on workflow, enabling them to consciously balance one in hopes of avoiding stress from inordinate investigation or loss from fast growth. Moreover, the FCM method approach to overcome the human training resource allocation tool (wireless network) validation loss may serve many functions in monitoring.

The simulation results in Figure 6 show that FCM significantly improves framework performance and reduces task execution time when compared to the wireless network's definition resource target of scheduling and FCM



FIGURE 6: Predictive performance analysis for the simulation result surface effects is analyzed in human resource management.

,	,		
Number of neurons	Training accuracy	Validation accuracy	
3	86.66	80.04	
4	87.04	80.20	
5	87.30	80.44	
6	87.44	80.52	
7	87.46	80.72	
8	87.80	80.96	
9	87.94	81.22	
10	88.00	81.44	
11	88.52	81.73	
12	88.64	81.93	
13	89.00	82.17	
14	89.50	83.08	
15	89.98	83.86	
16	91.76	84.05	

TABLE 1: Performance analysis for human resource in training accuracy and validation accuracy.

ABLE 2: Performance	analysis for	numan	resource	III Ura	aming	loss
and validation loss.						

Number of neurons	Training loss	Validation loss
Number of fieurons		vandation 1033
3	0.009975	0.010725
4	0.009985	0.010724
5	0.009950	0.010723
6	0.009954	0.010720
7	0.009947	0.010716
8	0.009944	0.010710
9	0.009940	0.010690
10	0.009938	0.010660
11	0.009932	0.010630
12	0.009928	0.010595
13	0.009926	0.010580
14	0.009920	0.010553
15	0.009916	0.010510
16	0.009912	0.010502

algorithms, even when the significant relationship between network node performance and organizational type is ignored. Currently, different types of jobs are considered in this study, which includes network or wireless.

The simulation results in Figure 6 show that FCM significantly improves framework performance and reduces task execution time compared to the wireless network's definition resource target of scheduling and FCM algorithms. Even when the significant relationship between network node performance and organizational type is ignored, FCM shows improved performance. Currently, different types of jobs are considered in this study, including network or wireless parallel processing. This research discusses the additional types of human resource allocation, such as timetabling for target and result-focused and intensive distribution jobs. Artificial intelligence methods are introduced to determine the limitations of human resource allocation in obtaining results. Dynamic human resource influencing factors will also be added to clarify node performance leanings over time. Finally, experiments on large groups are carried out to validate the algorithm's efficiency. To determine the limitations of human resource allocation in obtaining results, artificial intelligence methods are introduced. Dynamic human resource influencing factors will also be added to clarify node performance leanings over time. Experiments on large groups are carried out to validate the algorithm's efficiency.

The suggested accuracy rate for ordinary training in Table 1 is 84.05%. To improve the predictive performance of human resources during model training, 16 neurons must be decided to increase for every 0.01 increment in dynamic data. When the training accuracy rate exceeds 84%, the prediction performance improves, but this cannot compensate for an increase in the number of nodes (neurons), so the

Algorithm	Training accuracy/loss	Testing accuracy/loss	Validation accuracy/loss	Overall accuracy (%)
Fordful Carson Method (FCM)	0.009989	0.009992	0.09992	99.12
Existing methods: Adam	0.008921	0.008712	0.08967	91.34

highest efficiency occurs when the volume of human resource work schedule data is high.

In Table 2, the indicated accuracy rate for regular training is 80%. To improve the correlation performance of human resources throughout model training, 16 neurons are thought to decrease with each 0.01 decrement in dynamic data. The decrease in predictive accuracy cannot compensate for the difference in node growth (neurons). However, when the quantity of human resource given condition data exceeds 79 percent, the efficiency is at its maximum.

While interacting with a possible candidate, artificial intelligence can also be used to automate time-consuming and tedious processes. The email, calendar, and application tracking system of a company can all be connected with artificial intelligence (AI) to spot patterns in the data and recommend the optimal times of the day to contact possible candidates about open positions. To run an organization, every organization requires an intelligent timetable. This research proposes the Fordful Carson Method (FCM) for organizing human resource management activities utilizing an intelligent network system. The study's findings demonstrated that the algorithm aids in improving human resource performance. It compared for the existing method is a better result provided in our proposed method (refer Table 3).

4. Conclusions

Artificial intelligence can be used to streamline tiresome and time-consuming tasks while interacting with a potential candidate. An organization's email, calendar, and applicant tracking system can all be integrated with artificial intelligence (AI) to identify patterns in the data and suggest the best times of day to contact potential candidates about job openings. Every organization needs an intelligent scheduling system for managing human resources. This study proposed Fordful Carson Method (FCM) using the intelligent network system for scheduling the activities occurs in human resource management. The study results proved that the algorithm helps in enhancing the performance of human resources. The proposed model has provided an accuracy of 99.1%.

Data Availability

The data used to support the findings of this study are available from the corresponding author upon request.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this paper.

References

- H. Zhang, J. Li, M. Hong, and Y. Man, "Artificial Intelligence Algorithm-Based Multi-objective Optimization Model of Flexible Flow Shop Smart Scheduling," in *Applications of Artificial Intelligence in Process Systems Engineering*, Elsevier, 2021.
- [2] E. Kambur, "How Artificial Intelligence (AI) Affects Human Resources Employees?," *Alanya Akademik Bakış*, 2021.
- [3] A. Rosenfeld, N. Agmon, O. Maksimov, and S. Kraus, "Intelligent agent supporting human-multi-robot team collaboration," *Artificial Intelligence*, vol. 252, pp. 211–231, 2017.
- [4] K. Ganasegeran and S. A. Abdulrahman, "Artificial Intelligence Applications in Tracking Health Behaviors During Disease Epidemics," in *Human Behaviour Analysis Using Intelligent Systems*, Springer International Publishing, 2019.
- [5] H. Sarrafzadeh and F. Mehdipour, "Intelligent Affect-Sensitive Tutoring Systems," in *Smart and Intelligent Systems*, CRC Press, 2021.
- [6] Y. Lu, Research on the Application of Data Mining Technology in Human Resource Management Systems, Beijing University of Posts and telecommunications, Beijing, China, 2020.
- [7] L. Y. Wang and C. I. Peng, "Application of decision tree algorithm in human resource recommendation technology," *Modern Electronic Technology*, vol. 44, no. 3, pp. 105–110, 2021.
- [8] M. Liu, H. Liu, W. L. Lihong, and W. Zheng, "Exploration of human resource evaluation model based on ERP," *Energy Technology*, vol. 18, no. 9, pp. 90–93, 2020.
- [9] Q. Xia and F. Huang, "Data-driven human resource management: review and prospect," *China Personnel Science*, vol. 12, no. 6, pp. 72–87, 2020.
- [10] J. Tang, Programmer Recommendation System Based on Git Hub, Yangzhou University, Yangzhou, China, 2020.
- [11] Y. Li, S. Li, Y. Song, F. Zhang, and X. Zhou, "Human resource recommendation based on K-means clustering algorithm of spark platform," *Journal of Jinan University (Natural Science & Medicine Edition)*, vol. 34, no. 5, pp. 430–435, 2020.
- [12] L. Qi, Design and Implementation of a Personalized Recommendation System for Enterprise Training Resources, Harbin Institute of Technology, Harbin, China, 2018.
- [13] G. Liang, Human Resource Recommendation Algorithm Based on Lifting Tree and Neural Network, South China University of Technology, Guangzhou, China, 2018.
- [14] C. Lin, Human Resource Recommendation Algorithm Based on Hybrid Genetic Ensemble Learning, South China University of Technology, Guangzhou, China, 2018.
- [15] Z. Gu, Human Resource Recommendation Algorithm Based on the Hidden Semantic Model and Deep Forest, South China University of Technology, Guangzhou, China, 2018.
- [16] S. Research, "On job recommendation of AI companies based on data mining," *Value Engineering*, vol. 36, no. 34, pp. 42–44, 2017.
- [17] Z. Li, Human Resource Hybrid Recommendation Algorithm Based on Spark, South China University of Technology, Guangzhou, China, 2017.

- [18] W. Chen, Research on Human Resource Recommendation Algorithm Based on Deep Learning, South China University of Technology, Guangzhou, China, 2017.
- [19] F. Meng, Application Research of Human Resource Recommendation Engine Based on Hybrid Recommendation Algorithm, Beijing University of Technology, Beijing, China, 2014.
- [20] P. N. Q. Huong, "The quality OF human resources IN small and medium enterprises: current situation, reason, recommendations ON solutions," *Journal of Natural Remedies*, vol. 21, pp. 73–81, 2021.
- [21] O. Yabanci, "From human resource management to intelligent human resource management: a conceptual perspective," *Human-Intelligent Systems Integration*, vol. 1, no. 2-4, pp. 101–109, 2019.
- [22] A. Iqbal, "The strategic human resource management approaches and organisational performance," *Journal of Advances in Management Research*, vol. 16, no. 2, pp. 181– 193, 2019.
- [23] J. H. Marler and E. Parry, "Human resource management, strategic involvement and e-HRM technology," *International Journal of Human Resource Management*, vol. 27, no. 19, pp. 2233–2253, 2016.
- [24] L. Ma and M. Ye, "The role of electronic human resource management in contemporary human resource management," *Open Journal of Social Sciences*, vol. 3, no. 4, pp. 71–78, 2015.
- [25] S. Panos and V. Bellou, "Maximizing E-HRM outcomes: a moderated mediation path," *Management Decision*, vol. 54, no. 5, pp. 1088–1109, 2016.
- [26] M. Thite, e-HRM: Digital Approaches, Directions & Applications, Routledge, Oxford, England, 2018.
- [27] Y. Pan, "Heading toward artificial intelligence 2.0," *Engineer-ing*, vol. 2, no. 4, pp. 409–413, 2016.
- [28] Y. Shiroishi, K. Uchiyama, and N. Suzuki, "Society 5.0: for human security and well-being," *Computer*, vol. 51, no. 7, pp. 91–95, 2018.