UMAR BABA UMAR

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A competent System Analyst with knowledge of all aspects of Machine learning and deep learning that include Logistic regression, SVM, KNN, Neural Networks and Recommender Systems. As a software engineer, I have passion for developing new programs that are tailored to meet a company's organizational needs to further their success.

EDUCATION

MSc Management and Information Technology. **2019 – Till date**
Abubakar Tafawa Balewa University, Nigeria.
Thesis: Improved Medical Diagnosis using deep learning

Masters in Information Technology **2020 - 2022**
Bayero University Kano, Nigeria
Thesis: Medical Diagnosis using improved rule based algorithm

BTech in Information Technology **2012 - 2017**
Federal University Technology Minna, Nigeria
Thesis: Development of Model for Generation of Examination Timetable Using Genetic Algorithm

Secondary School Certificate
Himma International College, Minna **1999-2005**

1997-2005

Primary School Certificate
Faith school Kontagora

CERTIFÍCATE TRAINING

• Data Analytics with Python. IBM.	2022
• Project Management Certificate, Alison	2017
• Java Programming Certificate, AmiTech	2017
• Data Visualization with python Certificate. IBM	2016
• Web Development Certificate. Amitech Computer Institute.	2016
• Android Application Development Certificate, AmiTech Institute	2016

EXPERIENCE

RAW MATERIAL RESEARCH AND DEVELOPMENT COUNCIL **JUNE.2020– TILL DATE**
System Analyst

- Participate in ongoing research work
- Implementation, support and maintenance of ICT infrastructure including LAN, IP Telephones, routers and switches.
- Configuring and troubleshoot desktops, laptops, servers, hardware and software problems, ensured Microsoft Office 365 management.

Federal University of Technology E-library **April 2016 – October 2016**

Research Intern

- Monitored database management, handled websites development using Dreamweaver and Notepad++.
- Handled software development using PowerBuilder environment.

SKILLS

- Python
- Machine Learning
- Penetration Testing/ethical hacking
- Vulnerability assessment
- Programming using PHP, HTML, JavaScript, Java, C++
- Proficient in Microsoft Office Suites
- Excellent verbal and written communication skills
- Good Interpersonal and Problem-solving skills
- Strong Analytical and Problem-solving skills

SCHOLSRHIP AND AWARDS

- National Information and Development Fund Postgraduate Scholarship
- Petroleum Technology Development Fund Scholarship
- Udacity Data analytics Scholarship
- Certificate of meritorious Service(National Association of Library and Information Technology Student) -2013/2014
- Merit Award (Annual Inter-house Sports and Athletics Competition)-2017

MEMBERSHIP CERTIFICATE

- Nigeria Computer Society (NCS)
- Librarian's Registration Council of Nigeria
- Data Science of Nigeria
- Institute of Information Management (IIM)
- Nigeria Mathematics Society (NMS)
- Cybersecurity Experts Association of Nigeria (CSEAN)
- IEEE(Computer Society and Computational Intelligence Society)
- Internet Society
- International Association of Computer and Information Technology
- British Computer Society (BCS)
- Association of Computing Society

PUBLICATIONS

- **Design and Implementation of Examination Time Table using Genetic algorithm– 3rd International Engineering Conference(IEC) 2019**

Examination time table scheduling problem is one of the complexes, NP-complete and typical combinatorial optimization problem faced by the university community across the globe. Many researchers have studied the problem due to its NP-complete nature and highly- multi-constrained problem which seeks to find possible scheduling for courses. Creating an examination timetable for university is a very difficult, time-consuming and the wider complex problem of scheduling, especially when the number of students and courses are high. Several factors are responsible for the problem: increases number of students, the aggregation of

schools, changes in educational paradigms, among others. In most universities, the examination time table schedule is usually ended up with various courses clashing with one another. In order to solve this problem of time table scheduling for University examination and effective utilization of resources, this research proposed a model for examination time table generation using Genetic Algorithm (GA) probabilistic operators. GA has been successful in solving many optimization problems, including University time table. This is based on the fact that GA is accurate, precise, free from human error and robust for complex space problem. GA theory was also covered with emphasis on the use of fitness function and time to evaluate the result. The effects of altered mutation rate and population size are tested. By using Genetic algorithm, we are able to reduce the time required to generate a timetable which is more accurate, precise and free of human errors. The implication of this research is a solution, minimizing the time taken in timetable allocation and the clashing that usually characterize time table schedule.

- **SDN-based Intrusion Detection System; A methodological Review- International Research Journal of Modernization in Engineering Technology and Science,2022**

Cyber-attacks are becoming more sophisticated and thereby presenting increasing challenges in accurately detecting intrusions. Failure to prevent the intrusions could degrade the credibility of security services, e.g. data confidentiality, integrity, and availability (Gondal et al, 2019). The overall perception is that SDN capabilities will ultimately result in improved security. However, in its raw form, SDN could potentially make networks more vulnerable to attacks and harder to protect (Buyya, 2018). Intrusion detection system "IDS" are considered as the one of the best solutions for network security (Abbas et al, 2020). The aim of study is to review different articles on intrusion detection systems. After reviewing 50 articles, we discovered that many of the articles have employed the use of KDD CUP 99 dataset which is an outdated dataset. We also made recommendations on future investigations.

- **Application of Machine Learning Algorithm in Medical Diagnosis System; A methodological Review- International Research Journal of Modernization in Engineering Technology and Science, 2022**

We reviewed the current literature for the last ten years, from January 2009 to December 2019, in this report. The study looked at eight of the most often used databases, finding a total of 105 publications. In order to classify the most commonly used AI algorithms for medical diagnostic systems, a detailed analysis of those publications was done. We also go over several diseases and the AI approaches that can be used to treat them, such as Fuzzy Logic, Machine Learning, and Deep Learning. This study paper seeks to provide some key insights about current and historical AI strategies in the medical field, particularly in the areas of heart disease prediction, brain disease, prostate, liver disease, and kidney illness. Finally, the article suggests some directions for future investigation

- Incentive-based Collaborative Recommender system using metaheuristic algorithm approach :Review

This study takes a direction to enhance the above-mentioned studies incentive and penalized user model (IPU) recommender system. Different from the study of Trans et al (2019), this study exploits the properties of a model-based approach for clustering collaborative filtering using incentive and penalized user models. In this study algorithm developed by Mohammadpour et al. (2019), was used for clustered items, and recommendations will be based on the incentive and penalized user model (IPU). This study tested the efficiency of this algorithm on another type of data and user experience metric was not used in evaluating this study. Different from Mohammadpour et al. (2019), but similar Trans et al (2019), the quality of user experience will be evaluated in this study. The result of this study will be compared with the baseline cluster algorithm. This approach was evaluated using MovieLens ML-25M, Hetrec2011-Movielens-2k, Book-crossing dataset and Dataset from learning from set of items datasets.

CONFERENCE

- Development of a Model for Generation of Examination Timetable Using Genetic Algorithm

REFREES

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Prof. Adamu Noma
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