(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :08/12/2023

(21) Application No.202341083713 A
(43) Publication Date : 05/01/2024

(54) Title of the invention : AN EFFICIENT MECHANISM FOR EARLY DETECTION OF PROSTATE CANCER THROUGH AN OPTIMISED DEEP-LEARNING MODEL

(51) International classification	:G06N3/02, G06T7/00, G16H50/20, G16H50/30
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**
1)Mr. M S Sinchan
Address of Applicant :Student, Department of Electronics and Communication Engineering, NMAM Institute of Technology, Nitte, Karkala, Udupi, Karnataka, 574110, India ---------- ----------
2)Veerabhadraswamy K M
3)Dr. Omkar Pattnaik
4)Mrs. D. Marygetsy
5)Ashwini Gajakosh
6)Dr. Shwetha V
7)Mrs. M. Deepika
8)Dr. Praveena M V
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Mr. M S Sinchan
Address of Applicant :Student, Department of Electronics and Communication Engineering, NMAM Institute of Technology, Nitte, Karkala, Udupi, Karnataka, 574110, India ---------- ----------
2)Veerabhadraswamy K M
Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Government Engineering College, Mosalehosahalli, Hassan, Karnataka, 573212, India ---------- ----------
3)Dr. Omkar Pattnaik
Address of Applicant :Associate Professor, SOCSE, Sandip University, Nashik, Maharashtra, 422213, India ---------- ----------
4)Mrs. D. Marygetsy
Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Manakula Vinayagar Institute of Technology, Pondicherry, India ---------- ----------
5)Ashwini Gajakosh
Address of Applicant :C/O Dr. Amithkumar Gajakosh, #1/4, 1st Main, 7th Cross, Shakambari Nagar, 1st Phase JP Nagar, Bengaluru, Karnataka, 560078, India ---------- ----------
6)Dr. Shwetha V
Address of Applicant :Associate Professor, Department of Electronics and Communication Engineering, SJC Institute of Technology, Chickballapur, Karnataka, 562101, India ---------- ----------
7)Mrs. M. Deepika
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Malla Reddy College of Engineering for Women, Hyderabad, Telangana, 500100, India ---------- ----------
8)Dr. Praveena M V
Address of Applicant :Department of Computer Science and Engineering, Dr. Ambedkar Institute of Engineering, Bangalore, Karnataka, India ---------- ----------

(57) Abstract :
This invention presents an advanced system for the early detection of prostate cancer, utilizing a highly optimized deep-learning model. The core of the system is an artificial intelligence algorithm trained on a comprehensive dataset of medical images and patient histories. This model employs sophisticated neural networks to analyze prostate scans, detecting subtle signs of cancer that are often missed by traditional diagnostic methods. The system is designed to continuously learn and adapt, updating its algorithms with new data, thereby staying abreast of the latest medical research and practices. Its high precision and efficiency in diagnosis not only improve patient outcomes by enabling earlier treatment but also reduce the burden on healthcare resources by minimizing unnecessary procedures. Additionally, the system's user-friendly interface allows for seamless integration into existing healthcare infrastructures. This innovative approach sets a new standard in oncological diagnostics and has the potential to be adapted for a range of medical applications beyond prostate cancer.

No. of Pages : 19 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :16/07/2024

(21) Application No.202441054131 A

(43) Publication Date : 02/08/2024

(54) Title of the invention : SINGLE-IMAGE SUPER RESOLUTION

(51) International classification	:G06N0003040000, G06N0003080000, G06T0003400000, G06T0005000000, G06K0009620000
(86) International Application No	:NA
Filing Date	:NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number	:NA
Filing Date	:NA
(62) Divisional to Application Number	:NA
Filing Date	:NA

(71)**Name of Applicant :**

1)THANGEDI KISHORE

Address of Applicant :Assistant Professor Computer Science and Engineering (AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number:thangedikishore@gmail.com & 9985555713 Secunderabad ---------- ----------

2)Malla Reddy Engineering College

3)NERELLA VIVEK

4)D.V.V.BRAHMACHARI

5)Dr. M. AJAY KUMAR

6)CHINTHALA KEERTHI

7)E AVYAKTHA

8)NARESH BABU MERUGU

9)SUDHAKAR REDDY NARALA

10)M JAGAN MOHAN REDDY

11)NALLURI VENKATA MADHU BINDU

12)RONGALA RAVI

13)MUNIGALA MAHESHNATH

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)THANGEDI KISHORE

Address of Applicant :Assistant Professor Computer Science and Engineering (AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number:thangedikishore@gmail.com & 9985555713 Secunderabad ---------- ----------

2)Malla Reddy Engineering College

Address of Applicant :Malla Reddy Engineering College Dhulapally post via Kompally Maisammaguda Secunderabad -500100 Secunderabad ---------- ----------

3)NERELLA VIVEK

Address of Applicant :Assistant Professor Computer Science and Engineering Dept., Malla Reddy College of Engineering for Women , Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number: nerella.vivek16@gmail.com & 9866244443 Secunderabad ---------- ----------

4)D.V.V.BRAHMACHARI

Address of Applicant :Assistant Professor Computer Science and Engineering Dept., Universal College of Engineering and Technology, Dokiparru (v) NarasaraoPet Road, Medikonduru (M), Guntur – 522438 State: Andhra Pradesh, Email ID & Contact Number: db.achari72@gmail.com & 9949508458 Narsaraopet ---------- ----------

5)Dr. M. AJAY KUMAR

Address of Applicant :Associate Professor Electronics and communication Engineering Engineering Dept., Malla Reddy College of Engineering for Women , Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana. Email ID & Contact Number: ajayajju126@gmail.com & 7386766694 Secunderabad ---------- ----------

6)CHINTHALA KEERTHI

Address of Applicant :Assistant Professor Electronics and Communication Engineering Dept., Malla Reddy College of Engineering for Women, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana. Email ID & Contact Number: keerthureddychinthala@gmail.com & 7893351795 Secunderabad ---------- ----------

7)E AVYAKTHA

Address of Applicant :Assistant Professor Computer Science and Engineering Dept., Malla Reddy College of Engineering for Women , Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: TELANGANA. Email ID & Contact Number: avyaktha17 @gmail.com & 8790439965 Secunderabad ---------- ----------

8)NARESH BABU MERUGU

Address of Applicant :Assistant Professor Computer Science and Engineering(CSE), Sri Vasavi Institute of Engineering and Technology, Nandamuru, Pedana, Krishna District, Pin-521369 State: Andhra Pradesh. Email ID & Contact Number: naresh.sviet@gmail.com & 9848738591 Pedana ---------- ----------

9)SUDHAKAR REDDY NARALA

Address of Applicant :Assistant Professor Computer Science and Engineering Dept., Prasad V Potluri Siddhartha Institute of Technology, Chalasani Nagar, Kanuru, Vijayawada, 520007 State: Andhra Pradesh. Email ID & Contact Number: nsudhakar@pvpsiddhartha.ac.in & 9866385245 Vijayawada ---------- ----------

10)M JAGAN MOHAN REDDY

Address of Applicant :Assistant Professor Computer Science and Engineering (AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number: mjmreddy1978@gmail.com & 7013339222 Secunderabad ---------- ----------

11)NALLURI VENKATA MADHU BINDU

Address of Applicant :Assistant Professor Computer Science and Engineering (AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number: svmadhu.sms@gmail.com & 9494511759 Secunderabad ---------- ----------

12)RONGALA RAVI

Address of Applicant :Assistant Professor Computer Science and Engineering (AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number: raviecet5815@gmail.com & 6300281759 Secunderabad ---------- ----------

13)MUNIGALA MAHESHNATH

Address of Applicant :Assistant Professor Computer Science and Engineering (AIML) Dept., Malla Reddy Engineering College, Maisammaguda (Post. Via. Kompally), Mechal-Malkajgiri-500100. State: Telangana Email ID & Contact Number: Munigalamahesh321@gmail.com & 9052753601 Secunderabad ---------- ----------

(57) Abstract :

ABSTRACT The paragraph discusses advancements in single-image superresolution (SISR) achieved through deep convolutional neural networks (CNNs). While CNN-based approaches have significantly improved image quality in terms of peak signal-to-noise ratio (PSNR) and structural similarity (SSIM), they often demand substantial computing power, hindering their practical use. Additionally, many existing CNN models fail to fully utilize intermediate features crucial for precise image reconstruction. To tackle these challenges, the article introduces MADNet, a novel lightweight network design.MADNet focuses on enhancing multiscale feature expression and learning feature correlations efficiently. It introduces a Residual Multiscale Module with Attention Mechanism (RMAM) to bolster the representation of informative multicale features. This module helps in capturing diverse features across different scales, allowing for a more comprehensive understanding of the input image. Moreover, MADNet incorporates a Dual Residual-Path Block (DRPB) to leverage hierarchical features extracted from the original low-resolution images. By integrating these features at multiple levels, MADNet ensures a richer understanding of the image content, which aids in more accurate super resolution. MADNet utilizes dense connections between blocks to enhance information flow and facilitate feature reuse effectively.These connections enable seamless communication between different layers, promoting feature propagation and enhancing the overall performance of the network.Importantly, comparative evaluations show that MADNet outperforms existing models while utilizing significantly fewer computational resources, as measured by multiadds and parameters. This efficiency makes MADNet a promising solution for real-world applications where computational resources are limited.

No. of Pages : 10 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :18/12/2023

(21) Application No.202321086647 A
(43) Publication Date : 12/01/2024

(54) Title of the invention : DEEP LEARNING TECHNIQUES REVOLUTIONIZING BIOMEDICAL APPLICATIONS

(51) International classification :G16H0050200000, G16H0040670000, G06N0003080000, A61B0034300000, G16H0030200000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Praful V. Nandankar
Address of Applicant :Assistant Professor, Department of Electrical Engineering, Government College of Nagpur, Maharashtra, 441108, India ---------- ----------
2)Levina Tukaram
3)Santhosha B M
4)Sagar Balasaheb More
5)Prajwal Vitthal Bhalsing
6)Mrs. Suneeta Netala
7)Dr. G. Meena Devi
8)Mahammad Anwar
9)Santosh Kumar
10)Niveditha M K
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Praful V. Nandankar
Address of Applicant :Assistant Professor, Department of Electrical Engineering, Government College of Nagpur, Maharashtra, 441108, India ---------- ----------
2)Levina Tukaram
Address of Applicant :Associate Professor, Department of Computer Science & Engineering, K N S Institute of Technology, Bengaluru, 560064, Karnataka, India ---------- ----------
3)Santhosha B M
Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, Ballari Institute of Technology and Management, Ballari, Visvesvaraya Technological University, Karnataka, India ---------- ----------
4)Sagar Balasaheb More
Address of Applicant :Chief Technical Architect (CTA), Tech Mahindra Limited, United Kingdom, IP12JW, Suffolk, England, United Kingdom ---------- ----------
5)Prajwal Vitthal Bhalsing
Address of Applicant :Director of Information Security, Department of Computer Science, Indira Group of Institutes, Indira College of Commerce and Science, Universe Campus, Dhruv, New, Mumbai Hwy, Tathawade, Pune, Maharashtra, 411033, India ---------- ----------
6)Mrs. Suneeta Netala
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering, Malla Reddy College of Engineering for Women, Hyderabad, Telangana, 500100, India ---------- ----------
7)Dr. G. Meena Devi
Address of Applicant :Professor, Department of Mathematics, St. Joseph's College of Engineering, Chennai, Tamil Nadu, 600119, India ---------- ----------
8)Mahammad Anwar
Address of Applicant :Assistant Professor, Department of Electrical and Electronics Engineering, Ballari Institute of Technology and Management, Ballari, Visvesvaraya Technological University, Karnataka, India ---------- ----------
9)Santosh Kumar
Address of Applicant :CTO, Department of IT, The Shree Chanakya Education Society (SCES), 89/2 A, Tathwade, Near Mumbai Bangalore Highway, 411057, Pune, Maharashtra, India ---------- ----------
10)Niveditha M K
Address of Applicant :MBA in Marketing and Project Management, University of Mysore, Mysore, 570005, Karnataka, India ---------- ----------

(57) Abstract :
This invention harnesses the power of deep learning to revolutionize various facets of healthcare and biomedical applications. The novel deep learning-based system offers automated disease detection and diagnosis through medical image analysis, while also enabling personalized drug discovery and treatment optimization based on patient genetics and history. An integrated telemedicine platform ensures equitable access to healthcare expertise. Additionally, deep learning predictive analytics optimize resource allocation in healthcare facilities, and real-time decision support tools aid healthcare professionals in diagnosis and treatment. The invention also accelerates healthcare research by mining vast biomedical datasets. Wearable devices for health monitoring, privacy-preserving data storage, and robotic surgical systems further expand the scope of this groundbreaking innovation.

No. of Pages : 19 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :26/01/2024

(21) Application No.202441005407 A
(43) Publication Date : 09/02/2024

(54) Title of the invention : CALIBRATION OF LOW-COST INTERNET OF THINGS SENSORS IN ENVIRONMENTAL MONITORING NETWORKS VIA APPLICATION OF MACHINE LEARNING TECHNIQUES

(51) International classification :G06N0020000000, G06Q0030020000, A01G0025160000, G16H0050800000, H04L0067120000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. S. Vagdevi
Address of Applicant :Professor and Head, Department of AI & ML, City Engineering College, Bangalore Urban, Karnataka, 560062, India ---------- ----------
2)Dr. Deepthi VS
3)Kumar N. Krishna Murthy
4)Dr. Sandeep K V
5)Ms. Medichetti Devarshini
6)Mrs. Manjusha Pandalaneni
7)Dr. Sivakumar. M
8)Megha J
9)Chandrakala G Raju
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. S. Vagdevi
Address of Applicant :Professor and Head, Department of AI & ML, City Engineering College, Bangalore Urban, Karnataka, 560062, India ---------- ----------
2)Dr. Deepthi VS
Address of Applicant :Assistant Professor, Department of Computer Science and Engineering (Cyber Security), Dayananda Sagar College of Engineering, Bangalore, Karnataka, 560078, India ---------- ----------
3)Kumar N. Krishna Murthy
Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, P. E. S. College of Engineering, Mandya, Karnataka - 571401, India ---------- ----------
4)Dr. Sandeep K V
Address of Applicant :Assistant Professor, Department of Electronics & Telecommunication Engineering, Dayananda Sagar College of Engineering, Shavige Malleshwara Hills, Kumaraswamy Layout, Bengaluru, Karnataka, 560111, India ---------- ----------
5)Ms. Medichetti Devarshini
Address of Applicant :Assistant Professor, Department of ECE, Hyderabad, Telangana, India ---------- ----------
6)Mrs. Manjusha Pandalaneni
Address of Applicant :Associate Professor, Department of Mechanical Engineering, Malla Reddy Institute of Technology and Science, Hyderabad, Telangana, 500100, India ---------- ----------
7)Dr. Sivakumar. M
Address of Applicant :Associate Professor, Department of Electronics and Communication Engineering, Pragati Engineering College (JNTUK), Surampalem, Andhra Pradesh 533437, India ---------- ----------
8)Megha J
Address of Applicant :Assistant Professor, Department of Artificial Intelligence and Machine Learning, M S Ramaiah Institute of Technology, Bengaluru, Karnataka, 560050, India ---------- ----------
9)Chandrakala G Raju
Address of Applicant :Assistant Professor, Department of Information Science and Engineering, BMS College of Engineering, Bengaluru, Karnataka 560019, India ---------- ----------

(57) Abstract :
The invention presents a revolutionary approach to the calibration of low-cost Internet of Things (IoT) sensors within environmental monitoring networks. Utilizing advanced machine learning techniques, it continuously adjusts sensor readings in real-time, ensuring data accuracy and reliability. This innovation democratizes environmental monitoring by extending participation to citizens and smaller organizations, thus expanding the reach and accessibility of environmental data collection. By addressing the challenge of data accuracy in low-cost sensors, the system offers a cost-effective alternative to traditional monitoring equipment while maintaining data quality. It adapts to changing environmental conditions, reducing the need for manual adjustments, and fosters cross-disciplinary collaboration among environmental experts. Furthermore, it empowers individuals and communities to actively engage in monitoring their surroundings, enabling early detection of environmental threats, aiding climate modeling, public health monitoring, and resource management, and contributing to a more environmentally-conscious world. The invention's cost-effectiveness leads to significant budget savings, making it a valuable tool in sustainable environmental management.

No. of Pages : 22 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :31/01/2024

(21) Application No.202411006632 A
(43) Publication Date : 09/02/2024

(54) Title of the invention : A NOVEL HUMAN RESOURCE MANAGEMENT SYSTEM AND EMPLOYEE COMPENSATION PLANNING SYSTEM

(51) International classification :G06Q0010100000, G06Q0010060000, G06Q0010000000, B60T0013660000, G09B0019000000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. Urmila Yadav
Address of Applicant :Associate Professor, Sharda School of Law, Sharda University, Knowledge Park, Greater Noida, Uttar Pradesh, Pin 201306, India ---------- ----------
2)Mrs. Keerthi HK
3)Dr. Monica M
4)Dr. Lakshmi P
5)Mrs.Jhansi Rani Atluri
6)Dr. Ajitha. S
7)Dr. Vaishali Kothiya
8)Dr. Jyoti Dange
9)Shubhi Jain
10)Ms. Shubhi Srivastava
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Urmila Yadav
Address of Applicant :Associate Professor, Sharda School of Law, Sharda University, Knowledge Park, Greater Noida, Uttar Pradesh, Pin 201306, India ---------- ----------
2)Mrs. Keerthi HK
Address of Applicant :Assistant Professor, Department of MBA, Nitte Meenakshi Institute of Technology, Bengaluru, Karnataka, 560064, India ---------- ----------
3)Dr. Monica M
Address of Applicant :Assistant Professor, Department of MBA, Acharya Institute of Technology, Bengaluru, Karnataka, 560107, India ---------- ----------
4)Dr. Lakshmi P
Address of Applicant :Associate Professor, Department of Business Administration, Vidyvardhaka College of Engineering (VVCE), Mysuru, Karnataka 570002, India ---------- ----------
5)Mrs.Jhansi Rani Atluri
Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Malla Reddy College of Engineering for Women, Hyderabad, Telangana, 500100, India ---------- ----------
6)Dr. Ajitha. S
Address of Applicant :Associate Professor, Department of Master of Computer Applications, M.S.Ramaiah Institute of Technology, Bangalore 560054, Karnataka, India ---------- ----------
7)Dr. Vaishali Kothiya
Address of Applicant :Assistant Professor, Dean – Research, Innovation, Incubation & IPR Cell, Shree L. R. Tiwari College of Arts, Commerce & Science, Thane – 401107, Maharashtra, India ---------- ----------
8)Dr. Jyoti Dange
Address of Applicant :Assistant Professor, Department of Information Technology, Atharva College of Engineering, Malad West, Mumbai, Maharashtra 400095, India ---------- ----------
9)Shubhi Jain
Address of Applicant :Department of Electronics and Communication, Swami Keshvanand Institute of Technology Management and Gramothan, Jaipur, Rajasthan, Pincode 302017, India ---------- ----------
10)Ms. Shubhi Srivastava
Address of Applicant :Assistant Professor, Department of Information Science & Engineering, New Horizon College of Engineering, Bengaluru, Karnataka 560103, India ---------- ----------

(57) Abstract :
The proposed invention presents an innovative Human Resource Management (HRM) system and Employee Compensation Planning (ECP) system, seamlessly integrating automated HR processes and advanced compensation planning. The HRM component streamlines talent acquisition and personnel administration, while the ECP system introduces personalized compensation structures aligned with organizational goals. Rooted in scalability, adaptability, and ethical considerations, the system caters to diverse organizational needs. With a commitment to reshaping workplace cultures, the invention empowers HR professionals to make informed decisions, contributing to organizational growth, resilience, and a positive shift in the future of human capital management.

No. of Pages : 21 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/02/2024

(21) Application No.202441013439 A
(43) Publication Date : 08/03/2024

(54) Title of the invention : A STRATEGIC EVALUATION OF ELECTRONIC HUMAN RESOURCE MANAGEMENT SYSTEM (E HRM) IN IT AND ITES SECTOR

(51) International classification :G06Q0010100000, G06Q0010060000, A61P0003000000, G16H0010200000, C07C0323410000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Kavitha C
Address of Applicant :Research Scholar, Department of Commerce, IDE University of Madras, Chepauk, Chennai – 600005 ---------- ----------
2)Kalaiarasan C
3)Dr. Akhil P
4)Sarath S Unnithan
5)Yeramala Kalavathi
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Kavitha C
Address of Applicant :Research Scholar, Department of Commerce, IDE University of Madras, Chepauk, Chennai – 600005 ---------- ----------
2)Kalaiarasan C
Address of Applicant :Research Scholar, Room No: 101, Department of Commerce, IDE University of Madras, Chepauk, Chennai-600005 ---------- ----------
3)Dr. Akhil P
Address of Applicant :Assistant Professor, Department of Commerce, School of Commerce Finance and Accountancy, CHRIST (Deemed to be) University, Bangalore ---------- ----------
-
4)Sarath S Unnithan
Address of Applicant :Phd Research Scholar, Department of Commerce, IDE, University of Madras, Chepauk, Chennai - 600005 ---------- ----------
5)Yeramala Kalavathi
Address of Applicant :Assistant Professor, Department of ECE, Mallareddy College of Engineering for Women, Hyderabad, Telangana India, Pincode: 500054 ---------- ----------

(57) Abstract :
[06] Globalization along with the technological advances made by Information and Communication Technologies (ICTs), especially the Internet, has led the human resource management to undergo a radical change in terms of its concepts, policies, strategies and practices. Different aspects of administrative work in various organizations have been replaced by IT. In order to meet the varying demands and challenges of HRM, organizations adopt E-HRM or digital HRM, which are both used interchangeably. The electronic management of human resources provides the organizations with the procedures, decisions, relationships and structures required to exercise the various HR management functions within the organization. The current study has been conducted to examine the effectiveness of E-HRM practices from a multi-dimensional perspective on people and HR process and hence the research study was both exploratory and descriptive in nature. Individuals employed in the senior, middle and entry level positions along with the CHRO's (chief human resource officers) in the IT and ITES based companies in Bengaluru city constituted the sample frame for the present study. Questionnaire was adopted as the research instrument for collecting primary data for the study. Accompanied Drawing [FIG. 1] [FIG. 2][FIG. 3] [FIG. 4] [FIG. 5][FIG. 6] [FIG. 7] [FIG. 8][FIG. 9]

No. of Pages : 29 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :31/03/2024

(21) Application No.202441026890 A
(43) Publication Date : 05/04/2024

(54) Title of the invention : A NOVEL AI ENABLED WIRELESS COMMUNICATION NETWORK

(51) International classification :H04W0016140000, H04W0072040000, H04L0045000000, H04L0045240000, H04L0045120000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. Justin Sophia I
Address of Applicant :Assistant Professor, Department of Computer Science, Loyola College, Chennai, Tamil Nadu, 600034, India ---------- ----------
2)Dr. Chitra Kiran. N
3)K. B. V. Brahma Rao
4)Dr. R. Aruna
5)Mrs. Chappali Nirmala
6)Dr. Usha Rani B
7)Dr. Venkatesh T
8)Dr. Suraj Shankarrao Damre
9)Dr. Anita K. Patil
10)Dr. S.Sreelakshmi
11)R. P. Meenaakshi Sundhari
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Justin Sophia I
Address of Applicant :Assistant Professor, Department of Computer Science, Loyola College, Chennai, Tamil Nadu, 600034, India ---------- ----------
2)Dr. Chitra Kiran. N
Address of Applicant :Professor, Department of Electronics and Communication Engineering, Alliance College of Engineering and Design, Alliance University, Bengaluru, Karnataka, 562106, India ---------- ----------
3)K. B. V. Brahma Rao
Address of Applicant :Professor, Department of Computer Science and Engineering, Koneru Lakshmaiah Education Foundation, Vaddeswaram, Andhra Pradesh, 522302, India ---------- ----------
4)Dr. R. Aruna
Address of Applicant :Associate Professor, Department of Electronics and Communication Engineering, AMCEC, Bengaluru, Karnataka, India ---------- ----------
5)Mrs. Chappali Nirmala
Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Mallareddy College of Engineering for Women, Hyderabad, Telangana, 500100, India ---------- ----------
6)Dr. Usha Rani B
Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, AMC Engineering College, Bengaluru, Karnataka, 560083, India ---------- ----------
7)Dr. Venkatesh T
Address of Applicant :Assistant Professor (Sr.G), Department of Electronics and Communication Engineering, KPR Institute of Engineering and Technology, Coimbatore, Tamil Nadu, 641407, India ---------- ----------
8)Dr. Suraj Shankarrao Damre
Address of Applicant :Assistant Professor, Department of Information Technology, D Y Patil College of Engineering, Akurdi Pune, Pincode-412101, Maharashtra, India ---------- ----------
9)Dr. Anita K. Patil
Address of Applicant :Professor and Head, Department of Electronics & Telecommunication Engineering, Dr.Vithalrao Vikhe Patil College of Engineering, Ahmednagar, Maharashtra, 414111, India ---------- ----------
10)Dr. S.Sreelakshmi
Address of Applicant :Associate Professor, Department of Engineering Mathematics, HKBK College of Engineering, Bengaluru, Karnataka – 560045, India ---------- ----------
11)R. P. Meenaakshi Sundhari
Address of Applicant :Professor, Department of Electronics and Communication Engineering, P. A. College of Engineering and Technology, Pollachi, Coimbatore – 642002, Tamil Nadu, India ---------- ----------

(57) Abstract :
The proposed invention introduces a groundbreaking system of AI-enabled wireless communication networks, revolutionizing telecommunications through the seamless integration of Artificial Intelligence (AI) algorithms. This innovative system enhances network performance, reliability, and adaptability by imbuing wireless networks with cognitive capabilities akin to human intelligence. Key features include AI-driven spectrum sensing for dynamic spectrum allocation, intelligent resource allocation algorithms for optimizing bandwidth utilization and transmit power, and predictive maintenance mechanisms for proactive fault detection and mitigation. Additionally, adaptive routing algorithms dynamically adjust traffic paths based on real-time network conditions, enhancing overall throughput and latency. This transformative approach not only addresses the burgeoning demands for connectivity in our increasingly digital world but also unlocks opportunities for innovation across various sectors. The proposed system represents a paradigm shift in network design, paving the way for a future where intelligent connectivity is ubiquitous and seamless.

No. of Pages : 21 No. of Claims : 10

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/03/2024

(21) Application No.202441022055 A
(43) Publication Date : 29/03/2024

(54) Title of the invention : DEEP REINFORCEMENT LEARNING FOR RESOURCE ALLOCATION IN WIRELESS COMMUNICATION SYSTEMS

(51) International classification :H04W0072040000, G06F0009500000, H04W0072080000, H04W0016100000, H04L0041160000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. Zahira Tabassum
Address of Applicant :Associate Professor, Department of Electronics and Communication Engineering, HKBK College of Engineering, Bangalore, Karnataka, 560 045, India ---------- ----------
2)Mrs. Rashmi Rani Samantaray
3)Mrs. Anees Fathima
4)Dr. Sufia Banu
5)Mrs. Noor Ayesha
6)Dr. Abdul Azeez
7)Mrs. Korudu Surekha
8)Dr. S. Latha
9)Mr. T. Shanmugaraja
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Dr. Zahira Tabassum
Address of Applicant :Associate Professor, Department of Electronics and Communication Engineering, HKBK College of Engineering, Bangalore, Karnataka, 560 045, India ---------- ----------
2)Mrs. Rashmi Rani Samantaray
Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, HKBK College of Engineering, Bangalore, Karnataka, 560 045, India ---------- ----------
3)Mrs. Anees Fathima
Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, HKBK College of Engineering, Bangalore, Karnataka, 560 045, India ---------- ----------
4)Dr. Sufia Banu
Address of Applicant :Associate Professor, Department of Electronics and Communication Engineering, HKBK College of Engineering, Bangalore, Karnataka, 560 045, India ---------- ----------
5)Mrs. Noor Ayesha
Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, HKBK College of Engineering, Bangalore, Karnataka, 560 045, India ---------- ----------
6)Dr. Abdul Azeez
Address of Applicant :Associate Professor, Department of Electronics and Communication Engineering, HKBK College of Engineering, Bangalore, Karnataka, 560 045, India ---------- ----------
7)Mrs. Korudu Surekha
Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, Malla Reddy Engineering College for Women, Hyderabad, Telangana, 500 100, India ---------- ----------
8)Dr. S. Latha
Address of Applicant :Associate Professor, Department of Electronics and Communications Engineering, Sreenidhi Institute of Science and Technology, Hyderabad, Telangana, 501301, India ---------- ----------
9)Mr. T. Shanmugaraja
Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, KPR Institute of Engineering and Technology, Coimbatore, Tamil Nadu, 641 407, India ---------- ----------

(57) Abstract :
The proposed invention introduces a novel approach to resource allocation in wireless communication systems utilizing Deep Reinforcement Learning (DRL). Traditional methods struggle to adapt to dynamic network conditions, hindering efficiency and performance. By integrating DRL, the system autonomously learns optimal resource allocation policies, dynamically adjusting to real-time network demands, user requirements, and environmental factors. This innovative approach promises to enhance network efficiency, reliability, and scalability while reducing interference and latency. The system's adaptability enables it to address the complexities of modern wireless networks, accommodating diverse applications and user needs. Through iterative learning and optimization, DRL optimizes resource allocation, maximizing throughput and spectral efficiency while minimizing energy consumption. The proposed invention represents a significant advancement in wireless communication, offering a transformative solution to the challenges of resource management in dynamic and heterogeneous network environments.

No. of Pages : 23 No. of Claims : 10