INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATION & MANAGEMENT

IJRCM

A Monthly Double-Blind Peer Reviewed (Refereed/Juried) Open Access International e-Journal - Included in the International Serial Directories

Indexed & Listed at:

Ulrich's Periodicals Directory ©, ProQuest, U.S.A., EBSCO Publishing, U.S.A., Cabell's Directories of Publishing Opportunities, U.S.A.,

Open J-Gage, India [link of the same is duly available at Inflibnet of University Grants Commission (U.G.C.)],

Index Copernicus Publishers Panel, Poland with IC Value of 5.09 & number of libraries all around the world.

Circulated all over the world & Google has verified that scholars of more than 2980 Cities in 165 countries/territories are visiting our journal on regular basis.

Ground Floor, Building No. 1041-C-1, Devi Bhawan Bazar, JAGADHRI – 135 003, Yamunanagar, Haryana, INDIA

http://ijrcm.org.in/

CONTENTS

Sr. No.	TITLE & NAME OF THE AUTHOR (S)	Page No.
1.	**HUMAN RESOURCE MANAGEMENT PRACTICES IN HOSPITALS** *THOTA AMRUTHA VALLI & T. SUBBARAYUDU*	1
2.	**INVENTORY MODELS FOR DETERIORATING ITEMS WITH STOCK DEPENDENT PRODUCTION AND DEMAND RATES HAVING WEIBULL DECAY** *ESSEY KEBEDE MULUNEH & K. SRINIVASA RAO*	4
3.	**CHALLENGES BEFORE BUSINESS EDUCATION IN INDIA** *DR. SONAL SHARMA & DR. M. K. SINGH*	18
4.	**MULTI-CORE PROGRAMMING PERFORMANCE AND ANALYZES** *AJITKUMAR M. PUNDGE, DR. PRAPTI DESHMUKH, SANJAY AZADE & SATISH SANKAYE*	22
5.	**STUDY ON STREET LIGHTS EXECUTION USING SIMULATION MODEL WITH EXCLUSIVE FOCUS ON ARTIFICIAL INTELLIGENCE AND NEURAL NETWORKS** *ROOPSINGH TAKUR & KARUPPASAMY PANDIAN SP*	25
6.	**EFFICIENT VIDEO TRANSMISSION FOR WIRELESS COMMUNICATION NETWORKS USING ZIGBEE PROTOCOL** *MEENAKSHI.S, RAJKUMAR.S & S.MUTHUKUMARASAMY*	29
7.	**WIRELESS COMMUNICATION** *K. KRISHNAVENI*	33
8.	**SPIRAL SECURITY MODEL TO COUNTER THE THREATS DUE TO HUMAN FACTORS IN WEB APPLICATIONS** *BISWAJIT TRIPATHY & JIBITESH MISHRA*	36
9.	**AN EFFICIENT METHOD FOR IMAGE RESTORATION FROM MOTION BLUR AND ADDITIVE WHITE GAUSSIAN DENOISING USING FUZZY DE-NOISING AND RICHARDSON LUCY DECONVOLUTION** *N. UMADEVI & R. SUDHAMATHI*	40
10.	**STUDY OF LITERATURE FOR EFFECTIVE BUSINESS COMMUNICATION** *DR. PAWAN KUMAR SHARMA*	43
11.	**A PROCEDURAL APPROACH TO BRANDING HR** *DR. KALPANA KONERU & HYMAVATHI CHUNDURI*	46
12.	**BUYING BEHAVIOUR OF CONSUMERS WITH REGARD TO SOFT DRINKS WITH REFERENCE TO COIMBATORE CITY** *DR. A. KUMUDHA & THILAGA. S*	52
13.	**IMPACT OF GLOBAL FINANCIAL CRISIS ON THE FINANCIAL PERFORMANCE OF SELECTED PUBLIC SECTOR BANKS IN INDIA** *DR. V. MOHANRAJ & S.GOMATHI*	57
14.	**ELLIPTIC CURVE CRYPTOGRAPHY** *SANJEEV & DR. NAVEEN VERMA*	62
15.	**IMPACT OF STRESS ON ACADEMIC PERFORMANCE AMONG POST GRADUATE STUDENTS** NEELUFER ASLAM, DR. SRILEKHA GOVEAS & SUMI THOMAS	66
16.	**THE NEXT BIG THING IN COMPUTING IS CLOUD COMPUTING: AN INTRODUCTION, CONCEPT AND ISSUES** *C.VENISH RAJA & A.PAPPU RAJAN*	71
17.	**ADOPTION OF CONTEMPORARY COST MANAGEMENT TECHNIQUES FOR BETTER MANAGEMENT OF COSTS** *MANMEET KAUR & RAVINDER KAUR*	74
18.	**JOB SATISFACTION AMONG THE EMPLOYEES OF INSURANCE SECTOR: A STUDY OF SELECTED PRIVATE INSURANCE COMPANIES IN RAJASTHAN** *SHUBHASHREE SHARMA*	79
19.	**CORPORATE FUNDING OF POLITICAL PARTIES UNDER NEW COMPANY LAW** *MINNY NARANG*	84
20.	**SIGFREE WITH EXTENDED INSTRUCTION SEQUENCE GRAPH FOR DATA FLOW ANOMALY AND PROXY** *SHAIK SHAFIA*	91
21.	**A STUDY ON CHALLENGES OF INDIAN HOSPITALITY INDUSTRY AND REMEDIES FOR SUSTAINABILITY IN THE EVER CHANGING MARKET SCENARIO** *USHA DINAKARAN*	101
22.	**A STUDY ON PERFORMANCE EVALUATION OF PUBLIC & PRIVATE SECTOR MUTUAL FUNDS IN INDIA** *DR. BHUPENDRA SINGH HADA*	106
23.	**DETERMINANTS OF RURAL HOUSEHOLDS LOAN REPAYMENT PERFORMANCE, IN OROMIA NATIONAL REGIONAL STATE: THE CASE OF DODOTA WODEDA** *SOLOLOMON ALEMU & ADDISU BAJIRA*	112
24.	**AN ANALYSIS OF CELEBRITY ENDORSEMENT IN INDIA REGIONAL VS. NATIONAL CELEBRITIES** *CHARUL CHATURVEDI & DR. SUMAN PATHAK*	119
25.	**TERRITORIAL ACCOMMODATION OF ETHNIC CONFLICT AND ITS NEXUS WITH POST CONFLICT STATE BUILDING AND PEACE** *BEDASA TECHAN TEFERA*	124
26.	**GREEN BANKING SERVICES FOR SUSTAINABILITY** *VIJAY PULICHERI & SANGEPU RAJASHEKHAR*	132
27.	**IMPLEMENTATION OF DIRECT TAX CODE (DTC): PROBLEMS AND PROSPECTS** *AKSHATHA B.G.*	136
28.	**SERVICE QUALITY AND CUSTOMER SATISFACTION OF PEOPLE'S BANK IN JAFFNA DISTRICT** *K.THARMILA*	142
29.	**STAFF DEVELOPMENT FOR AUSTRALIAN HEALTHCARE PROFESSIONALS** *DR. DAVID JOSEPH PEREIRA*	150
30.	**HYBRID SCHEDULING ALGORITHM FOR WIMAX- PBDRR** *UMESH SINGH VISEN*	153
	REQUEST FOR FEEDBACK & DISCLAIMER	156

CHIEF PATRON

PROF. K. K. AGGARWAL

Chairman, Malaviya National Institute of Technology, Jaipur

(An institute of National Importance & fully funded by Ministry of Human Resource Development, Government of India)

Chancellor, K. R. Mangalam University, Gurgaon

Chancellor, Lingaya's University, Faridabad

Founder Vice-Chancellor (1998-2008), Guru Gobind Singh Indraprastha University, Delhi

Ex. Pro Vice-Chancellor, Guru Jambheshwar University, Hisar

FOUNDER PATRON

LATE SH. RAM BHAJAN AGGARWAL

Former State Minister for Home & Tourism, Government of Haryana

Former Vice-President, Dadri Education Society, Charkhi Dadri

Former President, Chinar Syntex Ltd. (Textile Mills), Bhiwani

CO-ORDINATOR

DR. SAMBHAV GARG

Faculty, Shree Ram Institute of Business & Management, Urjani

ADVISORS

DR. PRIYA RANJAN TRIVEDI

Chancellor, The Global Open University, Nagaland

PROF. M. S. SENAM RAJU

Director A. C. D., School of Management Studies, I.G.N.O.U., New Delhi

PROF. S. L. MAHANDRU

Principal (Retd.), MaharajaAgrasenCollege, Jagadhri

EDITOR

PROF. R. K. SHARMA

Professor, Bharti Vidyapeeth University Institute of Management & Research, New Delhi

EDITORIAL ADVISORY BOARD

DR. RAJESH MODI

Faculty, YanbuIndustrialCollege, Kingdom of Saudi Arabia

PROF. PARVEEN KUMAR

Director, M.C.A., Meerut Institute of Engineering & Technology, Meerut, U. P.

PROF. H. R. SHARMA

Director, Chhatarpati Shivaji Institute of Technology, Durg, C.G.

PROF. MANOHAR LAL

Director & Chairman, School of Information & Computer Sciences, I.G.N.O.U., New Delhi

PROF. ANIL K. SAINI

Chairperson (CRC), GuruGobindSinghI. P. University, Delhi

PROF. R. K. CHOUDHARY

Director, Asia Pacific Institute of Information Technology, Panipat

DR. ASHWANI KUSH
Head, Computer Science, UniversityCollege, KurukshetraUniversity, Kurukshetra
DR. BHARAT BHUSHAN
Head, Department of Computer Science & Applications, GuruNanakKhalsaCollege, Yamunanagar
DR. VIJAYPAL SINGH DHAKA
Dean (Academics), Rajasthan Institute of Engineering & Technology, Jaipur
DR. SAMBHAVNA
Faculty, I.I.T.M., Delhi
DR. MOHINDER CHAND
Associate Professor, KurukshetraUniversity, Kurukshetra
DR. MOHENDER KUMAR GUPTA
Associate Professor, P.J.L.N.GovernmentCollege, Faridabad
DR. SAMBHAV GARG
Faculty, Shree Ram Institute of Business & Management, Urjani
DR. SHIVAKUMAR DEENE
Asst. Professor, Dept. of Commerce, School of Business Studies, Central University of Karnataka, Gulbarga
DR. BHAVET
Faculty, Shree Ram Institute of Business & Management, Urjani

ASSOCIATE EDITORS

PROF. ABHAY BANSAL
Head, Department of Information Technology, Amity School of Engineering & Technology, Amity University, Noida
PROF. NAWAB ALI KHAN
Department of Commerce, AligarhMuslimUniversity, Aligarh, U.P.
ASHISH CHOPRA
Sr. Lecturer, Doon Valley Institute of Engineering & Technology, Karnal

TECHNICAL ADVISOR

AMITA
Faculty, Government M. S., Mohali

FINANCIAL ADVISORS

DICKIN GOYAL
Advocate & Tax Adviser, Panchkula
NEENA
Investment Consultant, Chambaghat, Solan, Himachal Pradesh

LEGAL ADVISORS

JITENDER S. CHAHAL
Advocate, Punjab & Haryana High Court, Chandigarh U.T.
CHANDER BHUSHAN SHARMA
Advocate & Consultant, District Courts, Yamunanagar at Jagadhri

SUPERINTENDENT

SURENDER KUMAR POONIA

CALL FOR MANUSCRIPTS

We invite unpublished novel, original, empirical and high quality research work pertaining to recent developments & practices in the areas of Computer Science & Applications; Commerce; Business; Finance; Marketing; Human Resource Management; General Management; Banking; Economics; Tourism Administration & Management; Education; Law; Library & Information Science; Defence & Strategic Studies; Electronic Science; Corporate Governance; Industrial Relations; and emerging paradigms in allied subjects like Accounting; Accounting Information Systems; Accounting Theory & Practice; Auditing; Behavioral Accounting; Behavioral Economics; Corporate Finance; Cost Accounting; Econometrics; Economic Development; Economic History; Financial Institutions & Markets; Financial Services; Fiscal Policy; Government & Non Profit Accounting; Industrial Organization; International Economics & Trade; International Finance; Macro Economics; Micro Economics; Rural Economics; Co-operation; Demography: Development Planning; Development Studies; Applied Economics; Development Economics; Business Economics; Monetary Policy; Public Policy Economics; Real Estate; Regional Economics; Political Science; Continuing Education; Labour Welfare; Philosophy; Psychology; Sociology; Tax Accounting; Advertising & Promotion Management; Management Information Systems (MIS); Business Law; Public Responsibility & Ethics; Communication; Direct Marketing; E-Commerce; Global Business; Health Care Administration; Labour Relations & Human Resource Management; Marketing Research; Marketing Theory & Applications; Non-Profit Organizations; Office Administration/Management; Operations Research/Statistics; Organizational Behavior & Theory; Organizational Development; Production/Operations; International Relations; Human Rights & Duties; Public Administration; Population Studies; Purchasing/Materials Management; Retailing; Sales/Selling; Services; Small Business Entrepreneurship; Strategic Management Policy; Technology/Innovation; Tourism & Hospitality; Transportation Distribution; Algorithms; Artificial Intelligence; Compilers & Translation; Computer Aided Design (CAD); Computer Aided Manufacturing; Computer Graphics; Computer Organization & Architecture; Database Structures & Systems; Discrete Structures; Internet; Management Information Systems; Modeling & Simulation; Neural Systems/Neural Networks; Numerical Analysis/Scientific Computing; Object Oriented Programming; Operating Systems; Programming Languages; Robotics; Symbolic & Formal Logic; Web Design and emerging paradigms in allied subjects.

Anybody can submit the **soft copy** of unpublished novel; original; empirical and high quality **research work/manuscript** ***anytime*** in ***M.S. Word format*** after preparing the same as per our **GUIDELINES FOR SUBMISSION**; at our email address i.e. infoijrcm@gmail.com or online by clicking the link **online submission** as given on our website (***FOR ONLINE SUBMISSION, CLICK HERE***).

GUIDELINES FOR SUBMISSION OF MANUSCRIPT

1. **COVERING LETTER FOR SUBMISSION:**

DATED: _____

THE EDITOR
IJRCM

Subject: **SUBMISSION OF MANUSCRIPT IN THE AREA OF .**

(e.g. Finance/Marketing/HRM/General Management/Economics/Psychology/Law/Computer/IT/Engineering/Mathematics/other, please specify)

DEAR SIR/MADAM

Please find my submission of manuscript entitled '_____' for possible publication in your journals.

I hereby affirm that the contents of this manuscript are original. Furthermore, it has neither been published elsewhere in any language fully or partly, nor is it under review for publication elsewhere.

I affirm that all the author (s) have seen and agreed to the submitted version of the manuscript and their inclusion of name (s) as co-author (s).

Also, if my/our manuscript is accepted, I/We agree to comply with the formalities as given on the website of the journal & you are free to publish our contribution in any of your journals.

NAME OF CORRESPONDING AUTHOR:
Designation:
Affiliation with full address, contact numbers & Pin Code:
Residential address with Pin Code:
Mobile Number (s):
Landline Number (s):
E-mail Address:
Alternate E-mail Address:

NOTES:

a) The whole manuscript is required to be in ***ONE MS WORD FILE*** only (pdf. version is liable to be rejected without any consideration), which will start from the covering letter, inside the manuscript.
b) The sender is required to mentionthe following in the **SUBJECT COLUMN** of the mail:
New Manuscript for Review in the area of (Finance/Marketing/HRM/General Management/Economics/Psychology/Law/Computer/IT/ Engineering/Mathematics/other, please specify)
c) There is no need to give any text in the body of mail, except the cases where the author wishes to give any specific message w.r.t. to the manuscript.
d) The total size of the file containing the manuscript is required to be below **500 KB**.
e) Abstract alone will not be considered for review, and the author is required to submit the complete manuscript in the first instance.
f) The journal gives acknowledgement w.r.t. the receipt of every email and in case of non-receipt of acknowledgment from the journal, w.r.t. the submission of manuscript, within two days of submission, the corresponding author is required to demand for the same by sending separate mail to the journal.

2. **MANUSCRIPT TITLE:** The title of the paper should be in a 12 point Calibri Font. It should be bold typed, centered and fully capitalised.

3. **AUTHOR NAME (S) & AFFILIATIONS:** The author (s) **full name**, **designation**, **affiliation** (s), **address**, **mobile/landline numbers**, and **email/alternate email address** should be in italic & 11-point Calibri Font. It must be centered underneath the title.

4. **ABSTRACT:** Abstract should be in fully italicized text, not exceeding 250 words. The abstract must be informative and explain the background, aims, methods, results & conclusion in a single para. Abbreviations must be mentioned in full.

5. **KEYWORDS:** Abstract must be followed by a list of keywords, subject to the maximum of five. These should be arranged in alphabetic order separated by commas and full stops at the end.

6. **MANUSCRIPT:** Manuscript must be in ***BRITISH ENGLISH*** prepared on a standard A4 size ***PORTRAIT SETTING PAPER***. It must be prepared on a single space and single column with 1" margin set for top, bottom, left and right. It should be typed in 8 point Calibri Font with page numbers at the bottom and centre of every page. It should be free from grammatical, spelling and punctuation errors and must be thoroughly edited.

7. **HEADINGS:** All the headings should be in a 10 point Calibri Font. These must be bold-faced, aligned left and fully capitalised. Leave a blank line before each heading.

8. **SUB-HEADINGS:** All the sub-headings should be in a 8 point Calibri Font. These must be bold-faced, aligned left and fully capitalised.

9. **MAIN TEXT:** The main text should follow the following sequence:

INTRODUCTION

REVIEW OF LITERATURE

NEED/IMPORTANCE OF THE STUDY

STATEMENT OF THE PROBLEM

OBJECTIVES

HYPOTHESES

RESEARCH METHODOLOGY

RESULTS & DISCUSSION

FINDINGS

RECOMMENDATIONS/SUGGESTIONS

CONCLUSIONS

SCOPE FOR FURTHER RESEARCH

ACKNOWLEDGMENTS

REFERENCES

APPENDIX/ANNEXURE

It should be in a 8 point Calibri Font, single spaced and justified. The manuscript should preferably not exceed ***5000 WORDS***.

10. **FIGURES &TABLES:** These should be simple, crystal clear, centered, separately numbered &self explained, and **titles must be above the table/figure**. **Sources of data should be mentioned below the table/figure**. It should be ensured that the tables/figures are referred to from the main text.

11. **EQUATIONS:**These should be consecutively numbered in parentheses, horizontally centered with equation number placed at the right.

12. **REFERENCES:** The list of all references should be alphabetically arranged. The author (s) should mention only the actually utilised references in the preparation of manuscript and they are supposed to follow **Harvard Style of Referencing**. The author (s) are supposed to follow the references as per the following:

- All works cited in the text (including sources for tables and figures) should be listed alphabetically.
- Use (**ed.**) for one editor, and (**ed.s)** for multiple editors.
- When listing two or more works by one author, use --- (20xx), such as after Kohl (1997), use --- (2001), etc, in chronologically ascending order.
- Indicate (opening and closing) page numbers for articles in journals and for chapters in books.
- The title of books and journals should be in italics. Double quotation marks are used for titles of journal articles, book chapters, dissertations, reports, working papers, unpublished material, etc.
- For titles in a language other than English, provide an English translation in parentheses.
- The location of endnotes within the text should be indicated by superscript numbers.

PLEASE USE THE FOLLOWING FOR STYLE AND PUNCTUATION IN REFERENCES:

BOOKS

- Bowersox, Donald J., Closs, David J., (1996), "Logistical Management." Tata McGraw, Hill, New Delhi.
- Hunker, H.L. and A.J. Wright (1963), "Factors of Industrial Location in Ohio" Ohio State University, Nigeria.

CONTRIBUTIONS TO BOOKS

- Sharma T., Kwatra, G. (2008) Effectiveness of Social Advertising: A Study of Selected Campaigns, Corporate Social Responsibility, Edited by David Crowther & Nicholas Capaldi, Ashgate Research Companion to Corporate Social Responsibility, Chapter 15, pp 287-303.

JOURNAL AND OTHER ARTICLES

- Schemenner, R.W., Huber, J.C. and Cook, R.L. (1987), "Geographic Differences and the Location of New Manufacturing Facilities," Journal of Urban Economics, Vol. 21, No. 1, pp. 83-104.

CONFERENCE PAPERS

- Garg, Sambhav (2011): "Business Ethics" Paper presented at the Annual International Conference for the All India Management Association, New Delhi, India, 19–22 June.

UNPUBLISHED DISSERTATIONS AND THESES

- Kumar S. (2011): "Customer Value: A Comparative Study of Rural and Urban Customers," Thesis, Kurukshetra University, Kurukshetra.

ONLINE RESOURCES

- Always indicate the date that the source was accessed, as online resources are frequently updated or removed.

WEBSITES

- Garg, Bhavet (2011): Towards a New Natural Gas Policy, Political Weekly, Viewed on January 01, 2012 http://epw.in/user/viewabstract.jsp

STUDY ON STREET LIGHTS EXECUTION USING SIMULATION MODEL WITH EXCLUSIVE FOCUS ON ARTIFICIAL INTELLIGENCE AND NEURAL NETWORKS

ROOPSINGH TAKUR
LECTURER
FACULTY OF INFORMATION TECHNOLOGY
ISLINGTON COLLEGE
LONDON METROPOLITAN UNIVERSITY
KATHMANDU

KARUPPASAMY PANDIAN SP
CHIEF EXECUTIVE OFFICER
THE PEOPLE MANAGEMENT FORUM
BANGALORE

ABSTRACT

Distribution Generation capacity and Network Expansion planning is a basic part of power network planning that determines where, when and how many new transmission should be added to the network. Distribution generation capacity is required for adequate performance of a distribution system. In this paper we present the reasons for studying Artificial intelligence (AI) and Neural networks (NN) for which they have used for distributed generation capacity and network expansion planning. Here will take intelligent streets of AI and NN where street lights will switch on and switch off according to the sunlight heat and rays with the help of various sensors and learning algorithms to implement this system. Sensors detect the temperature of heat and rays within each street of the premises. Back propagation algorithm is used to train the data samples in the knowledge database and check whether hidden layers or synaptic weights are giving exact output for inputs. Based on Monte Carlo simulation and Mat lab tool, a methodology has been developed to evaluate the switch on and switch off lights. Acquiring an input from sensors such as temperature, sun rays as inputs and matching with weights available in existing database or memory chip, for matching we are using pattern matching algorithm.

KEYWORDS
Artificial Intelligence, pattern matching, neural networks, sensors, Back propagation algorithm, Monte Carlo simulation.

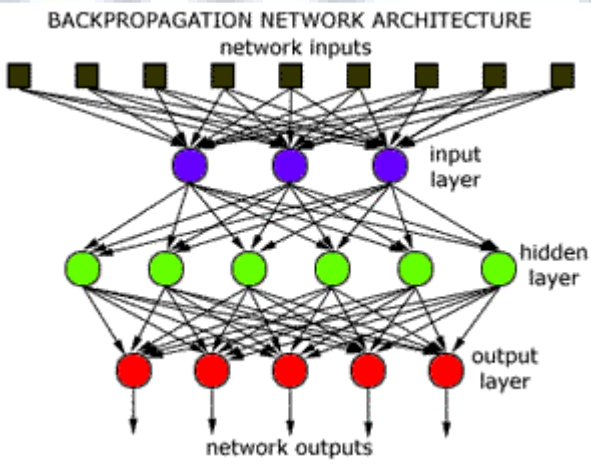
1. INTRODUCTION

Transmission network expansion planning and distributed generation is an important component of power system planning. Lights will be switch on and switch off according to the sunlight heat and rays. Heat and rays is read or observed by an input sensing device such as temperature sensors and light sensors. It sense or detect the temperature and light in the premises of the street poles. Light is measured through a photo resistive device (ORP 12) connected to a simple amplifier for level adjustment and impedance reduction through light sensors [5]. Temperature is measured through a heat system in OC through temperature sensors. For every random DG street sub stations we are using Automatic microprocessor control (AMC) carries out functions in a reactive way i.e. it responds to environmental conditions. The behavior of the AMC is controlled by a set of rules, but the way that rules are applied can be modified by high level commands. Lighting the streets without the help of manpower. So that we can switch on and off the lights according to the sun rise and sun set. By the method we can save power, time and cost. If person is not in time to switch on and switch off. This system will automatically on the light and off also.

2. BACK PROPAGATION ALGORITHM

Light switch on and off has been using sensor inputs to train a neural network via Back propagation [2]. A typical neural network has N inputs and one or more output as shown in Fig 1. The input layer is composed not of full neurons, but rather consists simply of the values in a data record, that constitutes inputs to the next layer of neurons. The next layer is called a hidden layer and there may be several hidden layers. The final layer is the output layer, where there is one node for each class. A single sweep forward through the network results in the assignment of a value to each output node and the record is assigned to which ever class node had the highest value. These actual inputs are fed into the network as the inputs. This approach works great when trying to detect or sense the input in the form of temperature or light with fixed orientation and scale. However at different scale and orientation, it doesn't give encouraging results. Therefore tokens of an input used during training, the network are trained; it identifies the input pattern and tries to output the associated output pattern. It must calculate how the error changes as each weight is increased or decreased slightly. The back propagation algorithm is the most widely used method for determining the EW. The power of neural networks is realized when a pattern of inputs, during testing, is given as an input and it identifies the matching pattern it has already trained in memory.

FIG 1



3. SENSORS

A sensor is a converter that measures a physical quantity and converts it into a signal which can be read by an observer or by an instrument. A thermocouple converts temperature to an output voltage which can be read by a voltmeter. In this paper we are using temperature sensor premises are measured by the system. Clearly they each have value in providing information for a control system but they also provide valuable contextual information for learning. Temperature is available to the system in ^{o}C. The central heating control has direct control of the central heating system. Control is made through a simple solid state device. The system is therefore able to make different sorts of control options available, other than simple temperature of time based control. Electricity sensor is senses the amount of electricity used by the streets or premises (in watts) is made available to the system every few seconds. This sensor is implemented by employing a current transformer on the main electricity feed that has a fixed low resistance stable resistor as its load. The voltage across this load is available to the system via a simple amplifier used for level adjustment. The value available is adjusted to a reading in watts through the use of constant. The system is able to detect the effect of some of its control operations using this measurement. Light sensor the light is measured in the streets or premises. The system uses constants to infer the light levels in different places. Ideally, each street has its own light level sensor. Light is measured through a photo resistive device (ORP12) connected to a simple amplifier for level adjustment and impedance reduction. This has been no attempt to recognized units of light level as an output. The sensor simple supplies a reading between o and 255 that is indicative of the ambient level. Automatic microprocessor controller (AMC) carries out functions in a reactive way. i.e. it responds to environmental conditions. The behavior of the AMC is controlled by a set of rules, but the way that rules are applied can be modified by high level commands. Lamps the system is allowed to have direct control over several lamps in the premises or streets. Other than in an emergency, the system is the only controller of these lamps. It was felt that some lamps would be unsuitable for system control because of the weather conditions may want light on or off at times. Lamps in areas control is made through simple solid state devices.

4. PROPOSED SCHEME

Block diagram of street lamps with sensors, microprocessor controller, lamps, and power lines of wires. In this fig.2 we are using sensors to detect or read an input from sun. By reading an input the sensors will get an activate according to the situation if it is sunrise the lamps will get switch off. If it is sunset lamps will switch on. In sunrise temperature, heat, light will increase at certain level sensors will detect or observe the premises or streets then the electricity will play a key role to inform to AMC with an exact input. This input will learn with back propagation to get exact output from trained samples. Then the pattern checker or matcher will give as input for Automatic Microprocessor controller (AMC) whether lamp should switch off or switch on.

PERFORMANCE EVALUATION

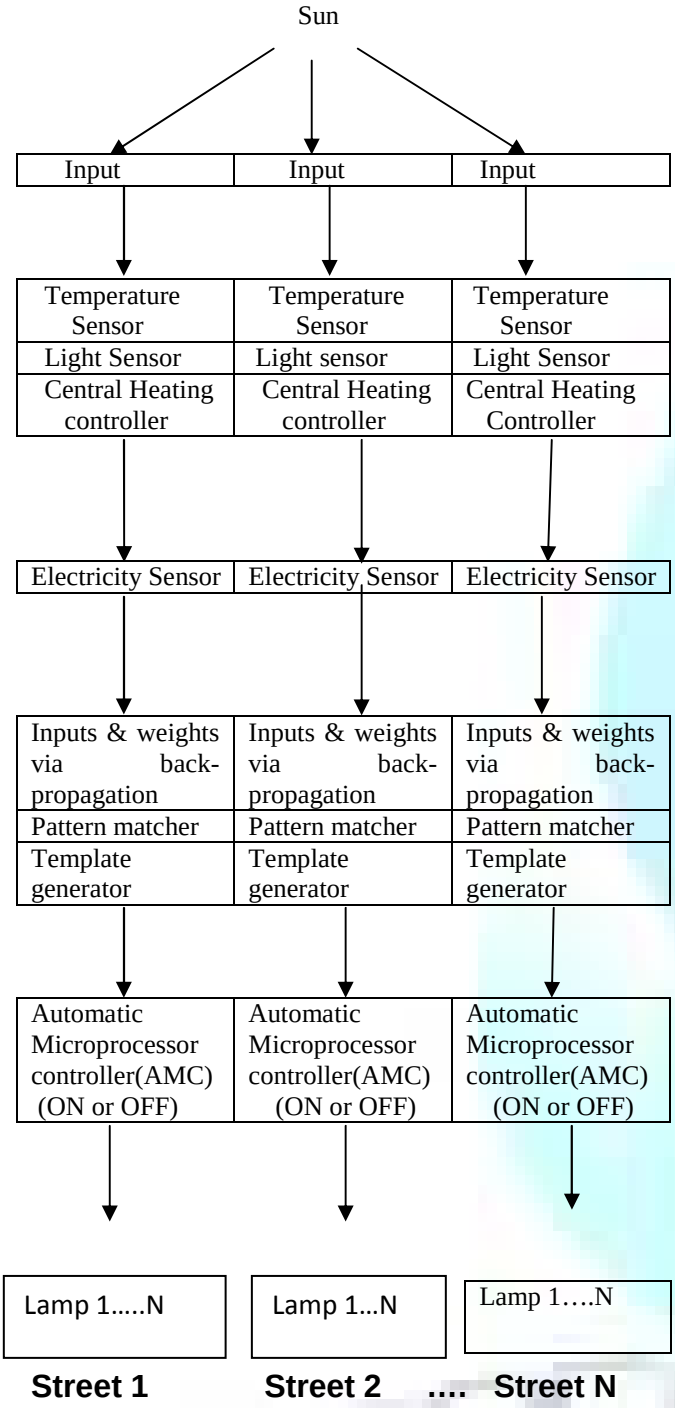
Step 1: Observe an input from sun through light sensor or central heating controller, temperature sensor for switch off or switch on the street lamps.

Step 2: Electricity sensor will take an input from above level sensors whether electricity should be flow or not to below levels.

Step 3: Once the Inputs are passed from step1, step2 to back propagation algorithm it will calculate the input with already trained weight samples to get exact output. If any error in the output these algorithm will recalculate or adjust the trained weights to optimize or minimize the error by giving new weights to system (AMC).

Initialize the weights in the network or sensors (often randomly)
Do
For each example ‘e’ in the training set
O= neural-net-output (network or sensors, e);
Forward pass
T= teacher output for e
Calculate error (T-0) at the output units
Compute delta _Wh for all weights from hidden layer
to output layer; backward pass
Compute delta_Wi for all weights from input layer to hidden layer; backward pass continued
Update the weights in the network or sensors until all examples classified correctly or stopping criterion satisfied
Return the Network or Sensors

Step 4: Pattern matcher or checker will give an input from Back propagation after matching to AMC to switch on or off the lamps in the streets.



5. TESTING AND RESULTS

Using Monte Carlo simulation model on AI and NN has been considered. The sensors signals input street each substation has been assumed as uniform, as given below:

F (S1) = 1/1.3 0.5 <S1<1.8

F (S2) = 1/1.3 0.5 <S2<1.8

Three DG street substations have been considered in this paper to switch off or on the lamps according to the temperature sensor, light sensor, central heating controller in table 1.

TABLE 1: WEIGHTS OF TRAINED BACK PROPAGATION ALGORITHM FOR REPRESENTING SWITCH ON AND OFF

S.I No (i)	1	2	3
W_i	-6.392978	0.288482	-0.288075
ΔW_i	4.000000	-2.773707	5.022678

Initially, the back propagation algorithm was trained with n=3 neurons in the hidden layer. The weights W_1-W_3 and ΔW_1- ΔW_2 of the ANN are given in table 1.

TABLE 2: VALIDATION OF TRAINED BACK PROPAGATION ALGORITHM

		TIME (%)		
S.I No	Sun input	Obtained from Light sensor (t_g)	Obtained From Light sensor (t_g)	Error (%) (t_g-t_a) **x** 100/t_g
1	0.50	1.00000	1.001279	-0.127
2	0.60	0.88330	0.872775	1.191
3	0.65	0.83350	0.822148	1.362

$S_{1,I}$ = 1.3 N_1 + 0.5
$S_{2,I}$ = 0.3 N_2 + 0.2
To represent the status of each DG; 4 random digits N_3 and N_4 were used and the status was decided based on the following:
0<=N_3<=0.78 DG-1 street is in ON (N) state
0.78<=N_3<=1.0 DG-1 street is in OFF (F) state
0<=N_4<=0.81 DG-2 street is in ON (N) state
0.81 <=N_4<=1.0 DG-2 street is in OFF (F) state
For each sample, the DG is calculated streets. Status of the states will change according to input.

7. CONCLUSION

It is very challenging task for AMC to switch on or off the lamps according to the environmental conditions. Although Existed systems are running by solar systems for switch on or off for street lamps. In our proposed scheme running with flow of Electricity and sensors, controllers. It is difficult to implement this system. Still there is a possible where we can implement this kind of system. Because all over the world we are using complete electronic devices and advance technology methods. In this scheme going with Back propagation algorithm were you can easily solve errors in this system by adjusting weights or updating weights from trained samples to get exact output. Major purpose of this paper In South Asian countries the electricity is a major problem by this research idea at least minimizing the wastage of power in the street lamps depending upon human power. The person should come to switch on and switch off the lamps on time (morning and evening) he have to cover enter streets in mean time. Cost factor will play a key role in this research idea.

8. REFERENCES

1. 'Deriving complex location data from simple movement sensors – 1990',John L.Gordon, D. Williams, C.A. Hobson 1990 Liverpool Polytechnic, Byrom Street, Liverpool L3 3AF (UK), Robotica Vol8. Pages 151-158, 1990
2. Al-Saba, T. & El-Amin, I. (2002). The application of artificial intelligent tools to the transmission expansion problem. International Journal of Electric Power Systems Research (Elsevier), 62, 117-126.
3. Anderson J.R., "A Theory of the Origins of Human Knowledge." Machine Learning Paradigms and Methods, Ed Jamie Carbonell, MIT Press, pp313-351, 1990
4. Fu L Min (1994), Neural Network in Computer Intelligence, McGraw-Hill Inc.
5. Gordon. J.L., "Investigation into the Application of Artificial Intelligence to Small Building Management" Ph.D. Thesis. Liverpool Polytechnic. 1992.
6. Haykin S. Neural Networks: A Comprehensive Foundation (2nd edn). Prentice-Hall: Englewood Cliffs, NJ, 1998..
7. Hecht-Nilsen R. Theory of the back propagation neural network. IJCNN International Joint Conference, Washington, DC, 1989; 593–605.
8. Hegazy Y G, Salama M M A and Chikhani A Y (2003), "Adequacy Assessment of Distribution Generation System Using Monte Carlo Simulation", IEEE Trans. On Power Systems, Vol. 18, No. 1, pp. 48-52.
9. J. Cohen, "Complex Learning", Rand McNally, New York, 1969
10. P.H. Winston, Artificial Intelligence Second Edition, Addison-Wesley 1984, P201
11. P.H. Winston, Artificial Intelligence second edition. (Addison-Wesley Publishing Reading, 1984) pp. 87-113
12. T. Cornick, "Intelligent Buildings, translating needs into practice" University of Reading Proceedings of the Intelligent Buildings Seminar December 1987 London (Unicorn Seminars, 1987) pp. 42-47
13. The original research project completed in 1990 was entitled 'Investigation into the Application of Artificial Intelligence to Small Building Management '(http://www.akri.org/ai/homes.htm).
14. Topalov, A., D. Tsankova, M. Petrov, and T. Proychev, Intelligent motion planning and control for a simulated mobile robot, Proc. of the 2nd IFAC Workshop on New Trends in Design of Control Systems, pp. 338-343, Smolenice, Slovac Republic, 1997
15. Using Short and Long Term Memory to induce environmental information from simple events – 1992, John L.Gordon, David Williams, Alan Hobson Liverpool Polytechnic, Byrom Street, Liverpool L3 3AF (UK), Robotica Vol10. Pages 65-74, 1992.

REQUEST FOR FEEDBACK

Dear Readers

At the very outset, International Journal of Research in Computer Application & Management (IJRCM) acknowledges & appreciates your efforts in showing interest in our present issue under your kind perusal.

I would like to request you tosupply your critical comments and suggestions about the material published in this issue as well as on the journal as a whole, on our E-mail**infoijrcm@gmail.com** for further improvements in the interest of research.

If youhave any queries please feel free to contact us on our E-mail infoijrcm@gmail.com.

I am sure that your feedback and deliberations would make future issues better – a result of our joint effort.

Looking forward an appropriate consideration.

With sincere regards

Thanking you profoundly

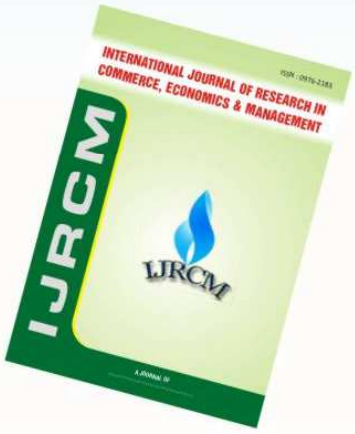
Academically yours

Sd/-
Co-ordinator

DISCLAIMER

The information and opinions presented in the Journal reflect the views of the authors and not of the Journal or its Editorial Board or the Publishers/Editors. Publication does not constitute endorsement by the journal. Neither the Journal nor its publishers/Editors/Editorial Board nor anyone else involved in creating, producing or delivering the journal or the materials contained therein, assumes any liability or responsibility for the accuracy, completeness, or usefulness of any information provided in the journal, nor shall they be liable for any direct, indirect, incidental, special, consequential or punitive damages arising out of the use of information/material contained in the journal. The journal, nor its publishers/Editors/ Editorial Board, nor any other party involved in the preparation of material contained in the journal represents or warrants that the information contained herein is in every respect accurate or complete, and they are not responsible for any errors or omissions or for the results obtained from the use of such material. Readers are encouraged to confirm the information contained herein with other sources. The responsibility of the contents and the opinions expressed in this journal is exclusively of the author (s) concerned.

ABOUT THE JOURNAL

In this age of Commerce, Economics, Computer, I.T. & Management and cut throat competition, a group of intellectuals felt the need to have some platform, where young and budding managers and academicians could express their views and discuss the problems among their peers. This journal was conceived with this noble intention in view. This journal has been introduced to give an opportunity for expressing refined and innovative ideas in this field. It is our humble endeavour to provide a springboard to the upcoming specialists and give a chance to know about the latest in the sphere of research and knowledge. We have taken a small step and we hope that with the active co-operation of like-minded scholars, we shall be able to serve the society with our humble efforts.

Our Other Journals