

K S R Institute for Engineering and

Tiruchengode, Namakkal(Dt), Tamil Nadu (Approved by AICTE New Delhi & Affiliated to Anna University Chennai)

3.3.3 Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per Teacher

INDEX

Academic Year	Number of Pul	olications	Total
2019-20	Books	11	72
	Conferences	61	12
2018-19	Books	-	
2017-18	Books	10	10
2016-17	Books	11	11
0045.40	Books	6	07
2015-16	Conferences	01	

ACADEMIC YEAR: 2019-2020

Book Publications

S.N O	NAME OF THE TEACHER	TITLE OF THE BOOK/CHAPTERS PUBLISHED	YEAR OF PUBLICATI ON	ISBN/ISSN NUMBER OF THE PROCEEDING	NAME OF THE PUBLISHER	PAGE NO.
1	Dr.M.Venkatesan	Computer Architecture and Organization	2019	978-9384 634-89-6	ARS Publications	10 – 12
2	Dr. P.Meenakshi Devi	Computer Architecture	2019	978-93-87255-56-2	ARS Publications	13 – 15
3	Dr. M.Vimaladevi	Cryptography and Network Security	2019	978-93-87670-78-6	Suchitra Publications Chennai	16 – 17
4	V.Prakasham	Cryptography and Network Security	2019	978-93-87670-78-6	Suchitra Publications Chennai	18 – 19
5	Dr. M.Vimaladevi	Big Data Analytics	2019	978-93-87670-74-7	Suchitra Publications Chennai	20 – 21
6	Dr. M.Vimaladevi	Compiler Design	2019	978-93-87670-73-0	Suchitra Publications Chennai	22 - 23
7	Dr. P.Meenakshi Devi	Computer Architecture and Organization	2019	978-9384 634-89-6	ARS Publications	24 – 26
8	Dr. P.Meenakshi Devi	Computer Architecture	2019	978-93-87255-56-2	ARS Publications	27 – 29
9	Dr.J.C.Kannan	Engineering Physics	2019	978-93-89051-63-6	The Charulatha Publications Chennai	30 - 31
10	Dr. V. Devabharathi	Engineering Physics	2019	978-93-89051-63-6	The Charulatha Publications Chennai	32 – 33
11	Dr. D.Madhan	Engineering Physics	2019	978-93-89051-63-6	The Charulatha Publications Chennai	34 – 35

Conference Publications

S.No	NAME OF THE TEACHER	TITLE OF THE PAPER	TITLE OF THE PROCEEDINGS OF	ISBN/ISSN NUMBER OF THE PROCEEDING	NAME OF THE PUBLISHER	PAGE NO.
1.	Dr. B.Kalaavathi	Lung Tumor Classification and Detection from CT Scan	2019 International Conference on Computational	978-1-7281-3778-0	IEEE	36 – 37
		Images using Deep Convolutional Neural Networks (DCNN)	Intelligence and Knowledge Economy (ICCIKE)			
2.	Dr. B.Kalaavathi	Fake Currency Detection Using Image Processing	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	38
3.	Dr.B.Kalaavathi	E-Directory Service Mobile Application	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	39
4.	Dr. M.Vimala Devi	IOT Based Electrolyte Bottle For Healthcare	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	40
5.	Dr. P.Vijayalakshmi	Smart F2C Profiling Based on Culticated Product Direct Marketing System	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	41
6.	Dr. P.Vijayalakshmi	Udhiram	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	42
7.	Dr.M.Jaganatha n	Waste Segregation Management Using IOT	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	43
8.	Dr.M.Jaganatha n	Application of Blockchain Technology in Finance and Accounting	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	44

9.	V.Prakasham	Inter-Vlan With Nat in Cloud	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	45
10.	R.Venkatesan	Better and Faster Emergency Care During Accidents and Vehicle	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	46
11.	R.Venkatesan	Alumni Tracking System	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	47
12.	P.Jagadeesan	Automated Ration Distribution System	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	48
13.	V.Gopinath	Multivendor E-Commerce Website	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	49
14.	R.Sathya Priya	Smart Helmet & Intelligent Bike System	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	50
15.	Dr.R.Nandakum ar	Real Time Monitoring System for Aquaculture using IOT	Second National Conference on Emerging Engineering and Technology	978-81-9456848-0-5	VR1 Publications	51
16.	Dr.W.Deva Priya	Lane Departure Warning System	National Conference On "Challenges and opportunities In Industry 4.0 – COIN'2020	978-81-9456848-0-5	VR1 Publications	52
17.	S.Premalatha	An IOT Based Cloud System for Traffic Monitoring using Mobile Sensor Data Processing	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020	978-81-9456848-0-5	VR1 Publications	53
18.	B.Latha	Smart Walking Stick for Visually Challenged People using Raspberry- Pi	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	54

19.	P.Janani	Bio-metric Finger Print System	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	55
20.	B.Vinoth Kumar	Multipurpose Robots used in Agriculture	IEEE sponsored 6th International E – conference on Latest trends in science, engineering and technology (ICLTSET)	978-81-9456848-0-5	VR1 Publications	56
21.	K.Venkatachala m	Bike LCD Home Security Alert System Using GSM	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	57
22.	P. Premkumar	Health Management of Crop Precision with Smart Farming Technology using IOT	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	58
23.	P.Govindaraju	Smart Real Time Drainage Monitoring and controlling System using Arduino	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	59
24.	M.Udhayakumar	Accident Alert System	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	60
25.	P.Mohana Sunthari	A Compact Multiband Self Isolated Antenna for 5g Mm Wave Applications using MIMO	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	61
26.	M.V.Mahesh	Automatic Pesticide Spraying Controller	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	62
27.	J.Divakaran	Self Navigated Smart Dustbin for Smart Cities	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	63

28.	V.Sindhuja	IOT Based Fertilizer Injector for Agricultural Plants with Analyzing System	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	64
29.	K.Venkatachala m	LCD Automatic College Bell Using Arduino Microcontroller	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	65
30.	Mr.T.Marthanda n	Vehicle Air Pollution Monitoring Tracking System	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	66
31.	Dr.Murugesan.P	Heat Transfer and Friction Factor Characteristics of Variant Plain Tapes Fitted in a Double Pipe Heat Exchanger	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	67
32.	Dr.P.Gopinath	Mechanical Characterization Of Chicken Egg Shell Reinforced Al7075 Matrix Composite	National Conference On "Challenges and opportunities In Industry 4.0 – COIN'2020	978-81-9456848-0-5	VR1 Publications	68
33.	Dr.R.Mani	Extraction Of Fuel From Waste Plastic Using Pyrolysis Process	National Conference On "Challenges and opportunities In Industry 4.0 – COIN'2020	978-81-9456848-0-5	VR1 Publications	69
34.	Vasanthakumar. R	Heat Transfer And Friction Factor Characteristics Of Variant Twisted Tape Fitted In A Double Pipe Heat Exchanger	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	70
35.	G.Anitha	Experimental Investigation And Mechanical Properties Analysis Of Aluminium Metal Matrix Of Tip 2 And Gr Reinforced Composite	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	71

		Design And Analysis Of	National Conference On			
36.	G.Anitha	Automatic Stretcher Cum Wheelchair With Lifting And Shifting Mechanism	"Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	72
37.	Shanmugam M V	Design and Development of 3D Filament Extruder	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	73
38.	M.V.Shanmuga m	Design And Implementation of Bore Well Rescue System	National Conference On "Challenges and opportunities In Industry 4.0 – COIN'2020	978-81-9456848-0-5	VR1 Publications	74
39.	Gopalakrishnan. K	Design And Fabrication of Coconut de-husking Machine	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	75
40.	S.Balamurugan	Design and Analysis of Piston Coated with Ceramic Materials	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	76
41.	Ponnusamy.S	Banana Leaf Cutting Machine using Hydraulic Power Pack	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	77
42.	Mohanraj.A	Design & Analysis of Waste Heat Recovery in Domestic Refrigeration using R134a	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	78
43.	K.Velusamy	Design and Analysis of Connecting Rod using Different Alloy Material	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	79
44.	A. Premkumar	Design and Analysis of Chassis with Different Cross-section	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	80
45.	Mohanavelan.S	Design & Analysis of Different Insulation Material Flat Plate Solar Air Dryer	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	81

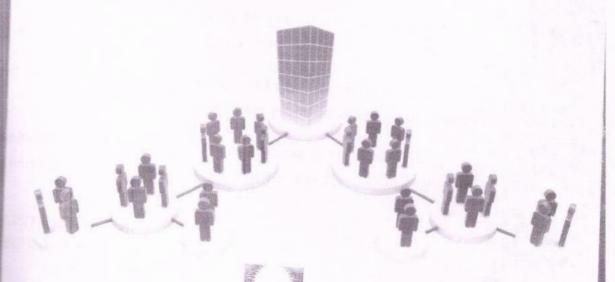
46.	P.Manikandan	Design and Performance Analysis of P2H Electric Vehicle (Porsche hybrid Electric Two wheeler)	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	82
47.	Chakravarthi P	Tribological and Micro Structural Analysis of Aluminium (LM6) Reinforced with Alumina and Silicon Carbide Micro Particles	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	83
48.	S.Rajkumar	Design and Analysis of Automatic Slicing Tender Coconut	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	84
49.	Rajkumar.S	Experimental Investigation on Friction and Wear Behaviour of Hybrid Copper Matrix Composites Synthesized by Powder Metallurgy	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	85
50.	Baskaran S	Design and Analysis of Automobile Leaf Spring for Various Cross Sections by using Different Composite Materials	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	86
51.	J.Mathan	Design and Analysis of Composite Material using GFRP in Propeller Shaft	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	87
52.	J.Mathan	Design and Automation of Coconut de-Husking Machine using Belt Conveyor	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	88
53.	S.Rahul	Tribological Behaviour of Aluminium Hybrid Metal Matrix Composite Reinforced with Coconut Shell ash and Egg Shell Ash	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	89

54.	P.Karthick	Design and Analysis of Sand Sieving Machine by using Composite Material	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	90
55.	Dr.S.Russia	Scalable Content -Aware Collaborative Filtering for Location Recommendation	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	91
56.	Dr. M.Dhurgadevi	Geo Sensor : Semanifing Change and Event Detection Over Big Data	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	92
57.	P.S.Prakash Kumar	Ontology - Based Data Access to Big Data	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	93
58.	P.S.Prakash Kumar	Blockchain Utilization in Healthcare : Key Requirements and Challenges	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	94
59.	S.Nandhagopal	E- Farmer Self Service	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	95
60.	P.Keerthana	Student Grievance Supported System	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	96
61.	K.Gowsic	An Android Application for Hush-Hush Voting System	National Conference On "Challenges and Opportunities in Industry 4.0 - COIN 2020"	978-81-9456848-0-5	VR1 Publications	97

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We are greatly indebted to **Lion. Dr. K. S. Rangasamy M.J.F.**, Chairman, K.S.R. Educational Institutions, for granting us an opportunity to write this book in a successful manner.

We would like to express our deep gratitude to our beloved Vice-Chairman Mr.R.Srinivasan, for his kind words and enthusiastic motivation in all our endeavors which inspires a lot in completing this book.

We are very much indebted to all our family members and our friends for their invaluable moral support at every stage of our work.

We thank all those who have helped us directly or indirectly in the successful completion of this book.

We would like to express our sincere thanks to A.R.S Publications for their support and help in publishing this book in a successful manner.

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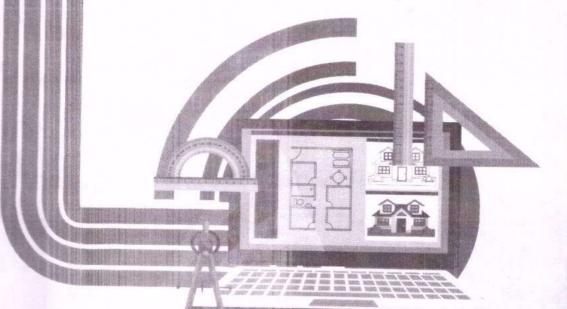
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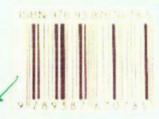
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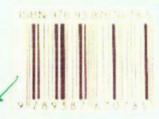
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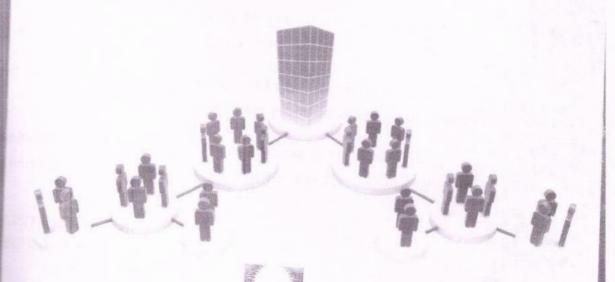
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We would like to express our deep gratitude to our beloved Vice-Chairman Mr.R.Srinivasan, for his kind words and enthusiastic motivation in all our endeavors which inspires a lot in completing this book.

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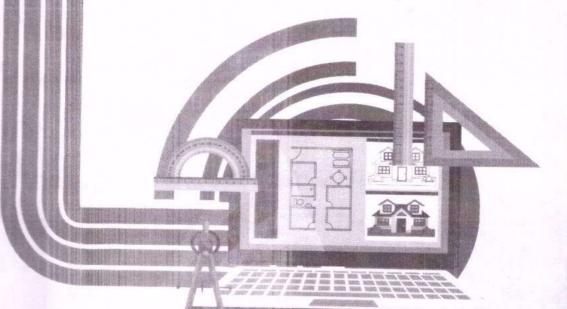
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Lung cancer is life-threatening diseases and it now affects all people regardless of gender. Precise lung tumor classification helps to diagnosis lung cancer early, which decreases the rate of death of lung cancer, but it is hard to detect early. Harmless or malignant is known as a lung tumor. It is innocuous when the tumor cells were healthy, when the cells are abnormal and can grow hysterically, they are cancerous cells, and the tumor is in curable. A classifier based on Deep Convolutional Neural Networks (DCNN), which classifies the lung tumor composed of different fully connected pooling and Convolutional layers. Three architectures were defined for DCNN classifier each one is trained with different patch size. DCNN is applied to the CT image for

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classification of benign and malignant lung tumor. The proposed architectures were examined on the LIDC database and cross checked with other classifiers result such as Artificial Neural Network Simulation result presents DCNN classifier achieves better performance.

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I. INTRODUCTION

Recent statistics from the world health institutions demonstrate that approximately 7.6 million people die every year in the world due to cancer. In regards, it is expected which cancer mortality will continue to rise to around 18 million worldwide in 2030. The main causes of death are Lung cancer mortality rate is counting for about 27% of all deaths from cancer [2]. The death of the lung cancer patients' numbers is morethan that of breast cancer. Due to lack of literacy towards lung cancer, the possibility of detecting the disease is harder at the early stage. In Sign in to Continue Reading other words, at the time of detection, already the disease reach to its advance stage [3]. The stages of lung cancer can be classified as first and second stage. The First stage refers to tumor presents only in limited area and the second stage is tumors that expand over to various body parts. Deep learning algorithms, especially DCNN, have rapidly become a popular methodology for processing medical images as well, including detection of medical problems, Feature Extraction, segmentation, and classification.

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S.Venmathi⁵

Professor & Head, UG Scholar ^{2,3,4,5}
Department of Computer Science and Engineering
K S R Institute for Engineering and Technology.

Abstract - Fake currency has always been an issue which has created a lot of problem in the market. These issues faced throughout the world in particular affecting the economy of almost every country including India. Counterficiting money stands for the illegal copying of original currency without the legal sanction of the state or government; hence counterfeit currency is a fake currency that has not been authorized by the government. RBI is the only bank to publish currency notes in India. In the course of recent years, because of the enormous innovative advances in shading printing, copying and examining, falsifying issues have turned out to be increasingly genuine. The rising technological advancement has made the opportunity for creating more forged currency. Producing counterfeit money is a form of fraud or forgery. Printing of Fake notes of Rs. 100, 500 and 1000 exits already there but after the demonetization, the counterfieit notes of new Rs.50,200,500,2000 have also come which effects the country's economic growth. The approach consists of a number of components including image processing, edge detection, image segmentation and characteristic extraction and comparing images. The expected results will be the text and voice output of the currency documented and confirmed. The proposed system has got advantages like simplicity, high performance speed, to develop an automatic fake currency detector system which is fast and easy to use for a common man and to develop low cost system, using effective and efficient techniques, to provide accurate and reliable results at good throughput.

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COIN CS 19

E - DIRECTORY SERVICE MOBILE APPLICATION

Dr.B.Kalaavathi¹

B.Swetha 2

R.S. Vasu Mitha³

A.Raja Rajan⁴

S.Komathi⁵

Professor & Head¹, UG Scholar^{2, 3, 4,5}
Department of Computer Science and Engineering
K S R Institute for Engineering and Technology.

Abstract - In present scenario, people are buried up in a heavy work culture, as everyone is engaged with busy schedules, and hectic tasks which make them deviate from fiamily life. If any issues encounter unexpectedly, it distracts them and makes them choose over the work they have to accomplish primarily. It is important to manage both professional and family life. In such circumstances, every one of us would have fantasized about a kind of house which doesn't have any leaks in pipes, if it doesn't have any mess in fixing a furniture and a kind of house which never face any maintenance issues and every one of us have thought that a life would be much better if no point of issue arises in getting a service at your door step and if there is no mess in bargaining a labour for home service. In such situation's E-Commerce plays a vital role in today's life as it has so many advantages in our life because it makes convenient in daily life of the people. So, giving a thought to that aspect of life is to design and develop a system that provides many services at your doorstep in just one click. A System that provides variety of services like plumbers, movers and packers, repair persons, cleaners, electricians, painters, salon, spa, laundry and many more. To make it comfortable for all the users our system also provides a mobile environment which offices ease in accessing our

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COIN CS 16

IOT BASED ELECTROLYTE BOTTLE FOR HEALTHCARE

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K.Dharani²

R.Jeevitha³

R.Manjula⁴

M.Praveen Kumar⁵

Associate Professor⁴, UG Scholar^{2,3,4,5}
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Abstract - During recent years, Good patient care in hospitals, assessment and management of fluid and electrolyte is the most flundamental thing required. In current health care measures, whenever a electrolyte bottle is fed to any patient, the patient needs to be continuously administered by a nurse or any caretaker. Almost in every hospital, a nurse or caretaker is responsible for monitoring the electrolyte bottle level continuously without any interruptions. In hospitals, due to heavy workloads nurses forget to change the electrolyte bottle once it is emptied, it will bring a bad consequences to the patient, the air bubbles entering the patient bloodstream which cause immediate death. Hence to prevent the patient from getting harmed and protect their lives during electrolyte bottle feeding period, the electrolyte bottle level monitoring system have been developed. The system consists of micro controller which receives input from the IR sensor and it sends output to the GSM module. An alerting signal using sound alarms for replacing the glucose trip bottle is being used in very few hospitals. The sound alarms may not be heard by nurses ifithey are not too close enough and obviously sound cannot be increased as it is a hospital. So replacing the sound alarms with the alerting phone message may be still more efficient since everyone will use their phone always and thus using a GSM module is not so much costlier and it can be easily implemented. The proposed system is built using Internet of Things (IoT) platform. The proposed system comprises of sensors which will act as a level sensor for monitoring the critical level of the electrolyte bottle. Electrolyte bottle reaches the critical level which is sensed by the IR sensors. This sensed output is sent to the micro-controller which scans the database for retrieving the contented information and alert is sent to the nurses and doctors in the hospitals. If the nurse attends the patient, then she should stop the buzzer and reset the whole system. if the nurse fails to attend the patient within the set time limit, the reverse flow of the blood into the electrolyte bottle is stopped. For this a spring-de motor arrangement will be made. The clamp will be attached to spring, along with the compression and stretching of spring, the clamp will also move in

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SMART F2C PROFILING BASED ON CULTIVATED PRODUCT DIRECT MARKETING SYSTEM

Dr.P.Vijayalakshmi¹

P.A jith Kumar²

E.Megasuriyan³

G.Vignesh⁴

Assistant Pro fessor¹, UG Scholar^{2,3,4}
Department of Computer Science and Engineering
K S R Institute for Engineering and Technology.

Abstract - Problem statement in Description System that provides farmers an interface to sell their produce, and connect with the buyers all over India Simple interface that works on mobile, SMS to upload produce details and respond via phone and SMS (taking care of digital divide). Interface for anyone to buy the produce/vegetable – initially visit the place and buy or have

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UDHIRAM

Dr.P.Vijayalakshmi¹

Mohammedsamir A²

Laxman Cibi S³

Assistant Professor¹, UG Scholar^{2,3}
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Abstract - This is a web application allows you to access the whole information about Blood Bank Management Software, readily scalable and adaptable to meet the complex need of Blood Banks Who are Key Facilitator for the Healthcare Sector, it also supports all the functionalities of Blood Bank. Entering the details about the blood groups, members, addresses etc. It is time consuming and leads to error prone result which consumes lot of manpower to better results where lacks of data security and retrieval of data takes lot of time. We are never short of donors; often it's the lead time

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COIN CZ 09

WASTE SEGREGATION MANAGEMENT USING IOT

Dr.Jaganathan M¹

Jayavarshini G²

Shilpa B³

Sruthi S4

Subhasree S⁵

Assistant Professor¹, UG Scholar^{23A,5}
Department of Computer Science and Engineering
K S R Institute for Engineering and Technology.

Abstract - Waste Management and segregation is a much-needed process in metro cities and urban areas due to spreading of diseases. It is estimated that India produces 42.0 million tons of municipal solid waste annually at present. Waste lying littered in the surrounding, dumped on open lands, becomes a major problem for various types of disease-causing bacteria and viruses hence, segregation, transport, handling and disposal of waste must be managed properly to minimize the risks of the public and environment. When mixed dry and wet waste breaks down in lowland, it creates nasty greenhouse gases. Segregation makes it attainable to utilize and recycle the waste effectively. This waste segregator system can easily segregate waste. When waste is thrown in the pipe, IR sensor will sense the waste. Waste is divided into three categories namely Wet, Dry and Metallic. Another sensor will sense the garbage category. If the waste is metallic then the mechanism will bring the metal collecting bin below the pipe and with the help of servo motor the waste will fall into the metal bin. Similarly, the process will repeat if wet waste is sensed. If the sensor doesn't activate both the sensor category then the waste will be considered to be a dry waste.

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APPLICATION OF BLOCKCHAIN TECHNOLOGY IN FINANCE AND ACCOUNTIG

Dr. Jaganathan M¹

Y.Akilan²

K.Manikandan³

A.Nathishkumar⁴

M. Venkatesh5

Assistant Professor¹, UG Scholar^{2, 3, 4, 5}
Department of Computer Science and Engineering
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Abstract - Block chaining technology is a distributed infrastructure and computing paradigm. The latest version is represented by the super account book. The latest version is block chain 3. From

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INTER-VLAN WITH NAT IN CLOUD

Prakasham.V1

Barath.K²

Krishnaganth T.A3

Visveswaran.B4

Munusamy.R5

Assistant Professor¹, UG Scholar^{2,3,4,5}.

Department of Computer Science and Engineering K SRInstitute for Engineering and Technology.

Abstract - Inter VLAN is to design a network for a software development association dependent on VLAN with Cisco routers and switches. The affiliation has three workplaces headway, testing and learner with high speed. The switches in all of the workplaces must be made sure about with port security. The customers in all of the workplaces should have buried find a good pace one another. All of the workplaces should be on different IP frameworks.

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BETTER AND FASTER EMERGENCY CARE DURING ACCIDENTS AND VEHICLE

Venkatesan R¹

Anisha N²

Ilakiya S³

Selvamalini J

Soundharya A5

Assistant Professor¹, UG Scholar^{2, 3,4,5}
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K SRInstitute for Engineering and Technology.

Abstract-The main objective of the proposed system is to avoid accident by giving indication through alarm buzzer. Accidents can occur anywhere, anytime therefore it is necessary to develop a system to avoid accidents. Now-a-days accidents are happening more frequently due to globalization, lack of attention, fast speed of vehicles. To overcome this problem the system has been developed in a simple manner using sensors. The sensor is used to control the speed of the vehicle and monitoring the speed by using speedometer and accelerometer. When the speed increases it gives the alarm and automatically controls the speed. The sensor is also used to send information to nearby emergency centers while the accident occurs. To overcome all the limitation this system is designed which is very efficient and easy to understand.

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COIN CS 10

ALUMNI TRACKING SYSTEM

Venkatesan R¹

Arun R²

Pugazhivelan P³

Velu Prabha S⁴

Assistant Professor, UG Scholar^{3,4}
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K S R Institute for Engineering and Technology.

Abstract- In current scenario, the database of Alumni is maintained by college which is static. Due to this reason, the real time information of alumni is not present on any central platform. So there is a need of an application which can keep all the college graduates in real time. Our thoughts of project, we make interaction between current studied students and passed out (Alumni's) students. Its main aim is focused on exchange the information. We build a web page (like as Facebook, LinkedIn) to registered the alumni's information. Its help to easily communicate with the college student's and post the information in web page related on what our do in company project? What they are working in industry project and currently use, advanced technologies. And we need to access the page with help of developing URL used to login and share our information to others. Our major aim is college students known about what happen in industry side, so this is our concept to make a project and Its way of presentation is mostly very interactive and useful for the every studied students. We design a web page for registration and login page initially, because the passed out students just register our details and join the page. Same time the already registered students directly login into go to the page, In which help of sharing the information via request to follow our alumni in web portal to gather some related information's. After that we daily post some interesting news and current issues on our portal to login the page view the content. And any type of program organizing our campus this way we invite the alumni's to join our festival and celebrations.

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AUTOMATED RATION DISTRIBUTION SYSTEM

M.P.Jagadeesan¹

S.Devi Gayathri²

S.Gowri³

R.Harini4

R.Indhu⁵

Assistant Professor, UG Scholar^{2,345}
Department of Computer Science and Engineering
K S R Institute for Engineering and Technology.

Abstract- One of the largest Government Economic Policy in India is the Ration Distribution System. The main motto of this system is to provide food grains like rice, wheat, sugar, kerosene etc., to people at affordable price. To provide food security to people, this system is spread all over India. State and Central Government of India controls this Ration Distribution System. The

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COIN CS 14

MULTIVENDOR E-COMMERCE WEBSITE

Gopinath V1

Yuvapriyanka V²

Devadharshini S S3

Swetha C⁴

Sowmiya S⁵

Assistant Professor¹, UG Scholar^{2,3,4,5}
Department of Computer Science and Engineering
K S R Institute for Engineering and Technology.

Abstract - Now-a-days most consumer products are available on e-commerce websites and e-commerce business is booming. Many businesses which want to sell their products online are facing difficulties in developing and maintaining e-commerce websites on their own as cost involved in building and maintaining and the time to develop a custom website platform are very high. As a result many vendors are unable to sell their products online. In order to solve these problems, we propose a cloud based multi-tenant, multi-vendor e-commerce platform as a service which. This proposed e-commerce platform allows tenants to develop a multi-vendor e-commerce market place as well as individual e-commerce websites for different vendors. In addition to developing e-commerce websites, this platform also enables development of mobile applications and desktop application via an API. This allows vendors in is to create an account which would allow product information to be updated securely and will allow users to buy goods from different vendors. Vendors can upload their own products into these system after get approval from Admin and can sell their products. Customer can view and buy their needed products by paying amount .This website comes with an Admin panel that was built with JavaScript, Php and MYSQL database. The Admin can manage the entire store through the Admin panel.

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SMART HELMET & INTELLIGENT BIKE SYSTEM

Sathya Priya R¹

Gowthamakumaran P2

Kamalesh M³

Pavithiran S⁴

Premnath R⁵

Associate Pro fessor!, UG Scholar2,31,5

Department of Computer Science and Engineering K SRI nstitute for Engineering and Technology.

Abstract-The main objective of this paper is to build a safety system which is integrated with the smart helmet and intelligent bike to reduce the probability of two-wheeler accidents and drunken drive cases. A smart helmet is a type of protective headgear used by the rider which makes bike driving safer than before. This implement by using advance feature like alcohol detection, accident identification use as a hands free device, fall detection. This makes not only smart helmet but also feature of smart bike. Its compulsory to wear helmet, without helmet ignition switch cannot ON. A RF Module as wireless link which able to communicate between transmitter and receiver. The LCD display is attached in the bike which helps to communicate with phone signal. Whether the phone get rings the LCD displays the number of a mobile phone. The ignore once button is connected with the LCD display used to avoid an unwanted calls.

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for participating and presenting his/her paper on SIMARI REAL TIME DRAINAGE MONITORING AND

CONTROLLING SYSTEM USING ARDUINO in National Conference on

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ICLTSET'20

6th International E - Conference on Latest Trends in Science, Engineering and Technology



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Indexed in ogle



This is to certify that Mr./Ms./Dr. Ms. P. Mohana Sunthari, AP/ECE

of KSR Institute for Engineering and Technology, Tiruchengode has presented a

paper titled "A COMPACT MULTIBAND SELF ISOLATED ANTENNA FOR 5G mm

WAVE APPLICATIONS USING MIMO

in the 6th International E - Conference on Latest Trends in Science, Engineering and Technology (ICLTSET'20) on April 13, 2020.

Dr. S. GOPINATH

Dr. D. BHANUTIRUCHENGODE 837 215,
Vice Principal NAMARICAL DE 1888 37 215,

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for participating and presenting his/her paper on - WEH	IICLE AIR POLLUTION	MONITORING
AND TRACKING SYSTEM	7.	in National Conference on
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for participating and presenting his/her paper on Experimental investigation and mechanical properties

analysis of aluminum metal matrix of tip a 4-gr reinforced composition National Conference on

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for participating and presenting his/her paper on Design and analysis of a	utomatic Stretchen Cum
Wheelchair with lifting and shifting mechanism	in National Conference on
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filament extruder	in National Conference on
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for participating and presenting	his/her paper on Design and	implementation of bore	vell
rescue dystem		in	National Conference on
" Challenges and Opportunities	in Industry 4.0" (COIN-2020) held or	n March 14, 2020 at KSR Institute for En	igineering and Technology,
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de-husking machine	in National Conference on
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Ceramic materials	in National Conference on
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for participating and presenting his/her paper on Banana leaf	
hydraulic power pack	in National Conference on
"Challenges and Opportunities in Industry 4.0" (COIN - 2020) held on March 14,	2020 at KSR Institute for Engineering and Technology,
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for participating and presenting his/her paper on Design & analysis of was te	heat
recovery indomestic refrigeration using R134 a	-in National Conference on
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K. VELUSAMY This certificate acknowledges and honours Dr. /Mr. /Ms. ---for participating and presenting his/her paper on Design and analysis of Connecting rod using different alloy material -in National Conference on "Challenges and Opportunities in Industry 4.0" (COIN - 2020) held on March 14, 2020 at KSR Institute for Engineering and Technology, Tiruchengode, Tamilnadu, India.



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This certificate acknowledges and honours Dr. /Mr. /Ms. — A · P.D.	REMKUMAR
for participating and presenting his/her paper on Design and and	elysis of chassis with
different cross - Section	in National Conference on
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material flat plate Solan air dryer	in National Conference on
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for participating and presenting his/her paper on Design and performance analy	ysis of PSH electric
Vehicle (Possche hybrid electric two wheeler)	in National Conference on
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for participating and presenting his/her paper on Tribological and microstructural analysis of

aluminium (LM6) reinforced with alumina and Silicon Carbide in National Conference on micro particles

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tender coconut	in National Conference on
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for participating and presenting his/her paper on Experimental investigation on friction and	wearbe has ious
of hybrid copper matrix composites synthesized by powder metallurgy	-in National Conference on
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This certificate acknowledges and honours Dr. /Mr. /Ms &. BASKARAN	
for participating and presenting his/her paper on Design and analysis of automol	sile leaf Springfor various
Cross Sections by using different Composite materials	in National Conference on
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This certificate acknowledges and honours Dr. /Mr. /Ms	IAN
for participating and presenting his/her paper on Design and analysis	
usinggfrp in propeller shaft	in National Conference on
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for participating and presenting his/her paper on Design and automation	of coconut
de husking machine using belt conveyor	in National Conference on
"Challenges and Opportunities in Industry 4.0" (COIN-2020) held on March 14, 2020 at KSR	Institute for Engineering and Technology,
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This certificate acknowledges and honours Dr. /Mr. /Ms. S. RAHUL

for participating and presenting his/her paper on Tribological behaviour of aluminum hybrid metal

matrix. composite reinforced with coconut shell ash and egg shell ashin National Conference on

"Challenges and Opportunities in Industry 4.0" (COIN-2020) held on March 14, 2020 at KSR Institute for Engineering and Technology,

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This certificate ac	cknowledges and honours Dr. /Mr. /Ms	P. KARTHICK	
for participating and present	ting his/her paper on Design and	analysis of sand sie	ving machine
by using comp			National Conference on
" Challenges and Opportunit	ties in Industry 4.0" (COIN - 2020) held or	1 March 14, 2020 at KSR Institute for Er	igineering and Technology,
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This ce	ertificate acknowled	lges and hono	urs Dr. /Mr. /N	ts. S.RU	SSIA, ASI	7 / 17
for participating a	and presenting his/I	ier paper on -	SCALAE	BLE CONTENT	- AWARE	COLLABORATIVE
	FILTERING	FOR	LOCATION	RECOMMEND	ATION	in National Conferenc
" Challenges and (Opportunities in In	dustry 4.0" (COIN - 2020) h	eld on March 14, 20.	20 at KSR Instit	ute for Engineering and Tech
Tiruchengode, Ta	milnadu, India.		PRIN	SIPAL,		
			K. S. R. IMS	TITUTE FOR ND TECHNOLOGY, I VI HAGAR,		

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easily. Identity theft and identity fraud are referred as two sides of cyber crime in which hackers and malicious user s obtain the personal data of existing legitimate users to attempt fraud or deception motivation for financial gain. E-Mails are used as phishing tools in which legitimate looking emails are sent making the genuine users identity with legitimate content with malicious URLs. It helps to steal consumers' personal data such as user names, account numbers, passwords and other financial account credentials. Spam E-Mails emerges or transforms as Phishing mails. Spoofed Mails plays a vital role in which the hackers pretends to be a legitimate sender posing to be from a legitimate organization which divulges the user to give his personal credentials. The content may escape from Content based filters or the email may be without any body of the message except malicious URL in it. This paper identifies malicious URLs in email through reduced feature set method. Hackers bypass anti-spam filtering techniques by embedding malicious URL in the content of the messages. Hence the URL analyzer method with the help of minimized phishing feature set identifies the malicious URL in the emails. R Studio is used as the front end to develop the application.

COIN_IT_15

GEOSENSOR: SEMANTIFYING CHANGE AND EVENT DETECTION OVER BIG DATA

Dr.M.Dhurgadevi1

G.Priyadarshni²

S.Mohanraj³

V.Steephen⁴

J.Stephenraj⁵

Associate professor1

UG Scholar^{2, 3, 4, 5}

Department of Information Technology

KSR Institute for Engineering and Technology

Abstract - GeoSensor is a novel, open-source system that enriches change detection over satellite images with event detection over news items and social media content. GeoSensor combines these two orthogonal operations through state-of-the-art Semantic Web technologies. At its core lies the open-source, semantics-enabled Big Data infrastructure developed by the EU H2020 BigDataEurope project. This allows GeoSensor to offer an on-line functionality, despite facing three major challenges of Big Data: Volume (a single satellite image typically occupies a few GBs), Variety (its data sources include two different types of satellite images and various types of user-generated content) and Veracity, as the accuracy of the end result is crucial for the usefulness of our system. We present GeoSensor's architecture in detail, highlighting the advantages of using semantics for taking the most of the knowledge extracted from news items and Earth Observation products. We also verify GeoSensor's efficiency through a preliminary experimental study.

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lenges and Opportun	iities in In	dustry 4.0" (C	01N - 2020) h	eld on March 14, 2020 at KSR	Institute for	Engineering and Technology,
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		n in Healthcare:
y Requirements and	1 Challenges	in National Conference on
d Opportunities in Industry 4.0" (CO	IN - 2020) held on March 14, 2020 at R	(SR Institute for Engineering and Technology,
Tamilnadu, India.	PRINCIPAL,	

b. word.

OAC Coordinator

COIN_IT_06

VERTICAL FARMING WITH AEROPONICS

K.C.Aparna Priya1

A.Aslamiya²

M.Dhanya³

K.Dharani Sri Kalyan4

UG Scholar^{1, 2, 3, 4}

Department of Agricultural Engineering
Paavai Engineering College.

Abstract - AEROPONICS is a system of growing plants without soil in suspended air with intermittent application of nutrient laden water to the roots of the plants in the form of mist. In our project we are using the above technique to grow lettuce, radish and Cucumber .A hole is made into the sidewalls of the PVC pipe and then the mesh pots are placed in the hole to hold the plant. The bottom of the pot acts as a supporting structure and separate root from the plant. A mist chamber is provided inside the PVC pipe to supply nutrient laden water in the form of mist to the roots which is automated for the regular supply of nutrients by using motor. These conditions allow for better plant nutrition assimilation in a more balanced way. The plants are provided with best condition regarding oxygenation and moisture. The nutrient solution we are using is the fish amino acid. As it is a soil less cultivation we are using rock wool as a germinating media. We are doing Aeroponics vertically to do agriculture in a limited space to meet the demands of the people as in growing population and reduction in cultivable land. This technique is more beneficial when compared to current farming techniques as in this we are using the resources to a full extent like this is the only farming method where limited water is used, decreases labor , expenses and environmental friendly.

COIN_IT_07

E-FARMER SELF SERVICE

ManiBharathi1

K.Saraswathy²

V.Yaksheetha³

R.Yuvapriya4

S.Nandhagopal⁵

UG Scholar^{1, 2, 3, 4}

Assistant Professor⁵

Department of Information Technology

KSR Institute for engineering and technology

Abstract - It is a web application designed using PHP as front end and My-SQL as back end. The aim of the project is to automate all the activities involved in procuring product from farmer and selling it to customers. In existing system farmers find difficult in reaching their cultivated product to consumers. This system requires an intermediate person to connect farmer and consumer and they will acquire a brokerage for this service. Because of this brokerage products will reach higher price and reduces farmer's profit. Thus a new profitable system if need to help farmers. Here farmer will post the vegetable and agricultural products that they had cultivated. These products are verified and

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approved by administrator who serves as intermediate between the farmer and customer. These posted product are visible to the customer, which they can able to purchase and order online. These ordered products will be delivered to the customer by appropriate farmers. In addition to that, this website provides better recommendation for each product based on customer's rating. Also it suggested the top moving products among the customers. In this way, the project has increased the efficiency of farmer's cultivation and selling it to the customer.

COIN_IT_08

STUDENT GRIEVANCE SYSTEM

S.Karkulazhi1

M.Karthika²

J.Kausalya³

P.Keerthana⁴

UG Scholar^{1,2,3}

Assistant Professor

Department of Information Technology

KSR Institute for engineering and technology

Abstract - The grievance is viewed by staff and appropriate action is taken. Admin of the website will have a privilege to take report of the grievances given by students. The application includes mail sending option and so Internet access to the system must be provided. Thus the application assists in better control of the system. The project entitled "STUDENT GRIEVANCE SYSTEM" is developed under the environment ASP .Net as Front End and MS SQL Server as Back-End. This project is developed for the purpose of implementing interaction between the student, faculty and HOD. Here student will give their grievance to the staff using their appropriate login provided to them. It includes mail sending option and so Internet access to the system must be provided. It assists in better control of the system.

COIN_IT_09

AN ANDROID APPLICATION FOR HUSH-HUSH VOTING SYSTEM

S.Indhumathi¹

S.Mounika²

S.Swetha³

Dr.K.Gowsic4

UG Scholar^{1, 2, 3}

Assistant Professor+

Department of Information Technology

KSR Institute for engineering and technology

Abstract - The project "AN ANDROID APPLICATION FOR HUSH-HUSH VOTING SYSTEM" is designed using Standard Android 4.0.3 platform. The platform used to develop the application is Eclipse IDE (Mars) with Java 1.6 Standard Edition. Traditional voting systems should be computerized to reduce the vote counting time, to provide evidence that a vote is being correctly

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approved by administrator who serves as intermediate between the farmer and customer. These posted product are visible to the customer, which they can able to purchase and order online. These ordered products will be delivered to the customer by appropriate farmers. In addition to that, this website provides better recommendation for each product based on customer's rating. Also it suggested the top moving products among the customers. In this way, the project has increased the efficiency of farmer's cultivation and selling it to the customer.

COIN_IT_08

STUDENT GRIEVANCE SYSTEM

S.Karkulazhi1

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COIN_IT_09

AN ANDROID APPLICATION FOR HUSH-HUSH VOTING SYSTEM

S.Indhumathi¹

S.Mounika²

S.Swetha³

Dr.K.Gowsic4

UG Scholar^{1, 2, 3}

Assistant Professor

Department of Information Technology

KSR Institute for engineering and technology

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ACADEMIC YEAR: 2017-2018

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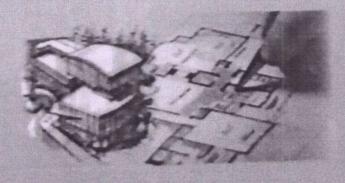
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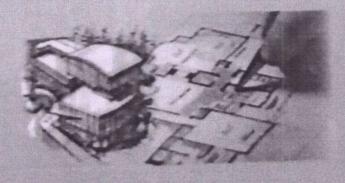
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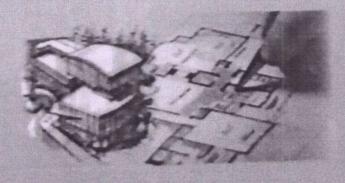
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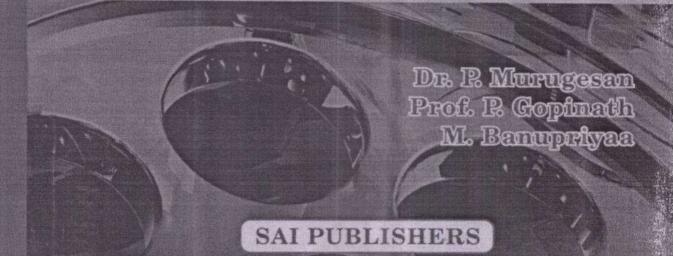
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Dr. P. Murugesan is working as Professor and Head of the Department in the Department of Mechanical Engineering, KSR Institute for Engineering and Technology, Tiruchengode. He obtained his Bachelor degree in Mechanical Engineering from University of Madras and Master degree in Thermal Power Engineering from Annamalai University. He completed his research work in the area of Heat transfer Enhancement from Anna University Chennai. He has about 18 years of experience in teaching graduate and post graduate classes and guiding research projects. He has presented number of papers in National and International conferences and also he has published a number of journals in National and International level.

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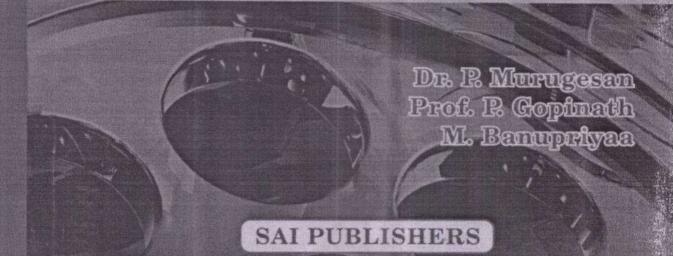
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ACKNOWLEDGEMENT

First and foremost, we would like to thank God. In the process of putting this book together we realized how true this gift of writing is for us to share our knowledge. You give us the power to believe in our passion and pursue our dreams. We could never have done this without the faith we have in you, the Almighty.

We sincerely thank our Colleagues, Parents, Family, Friends and Well-wishers for their understanding, patience and constant encouragement.

Finally, we offer our thanks to Proprietor of Rtn.Mr.A.Ramesh, A.R.S. Publications, Chennai and his Colleagues for their tireless effort in overseeing the production of the book.

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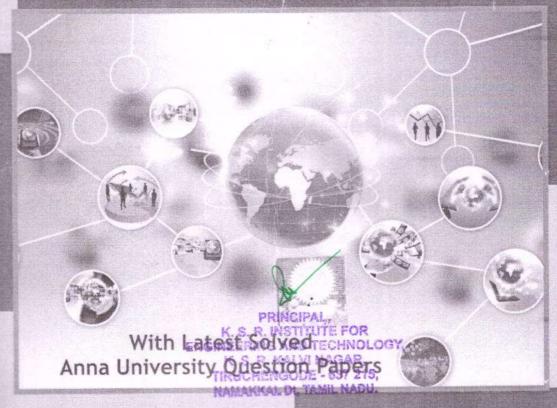


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The first part deals with introduction to wireless communication technology and basis of wireless adhoc ad senor networks. The second part deal with MAC protocols, routing protocols and transport layer protocols in Wireless adhoc networks and the third part deals with MAC protocols, routing protocols in Wireless sensor networks. In addition various issues in designing the wireless adhoc and senor network and QoS are discussed. The book has many significant highlights which includes lot of previous year question papers and question bank for each unit.

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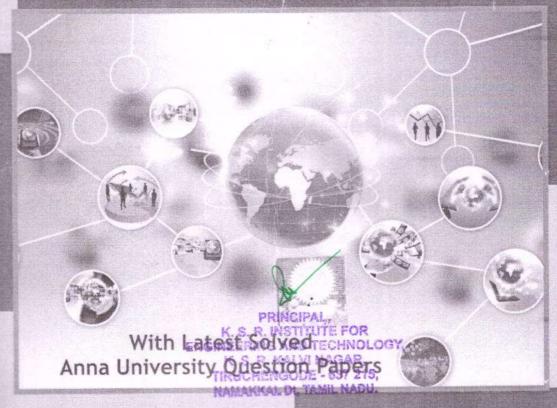
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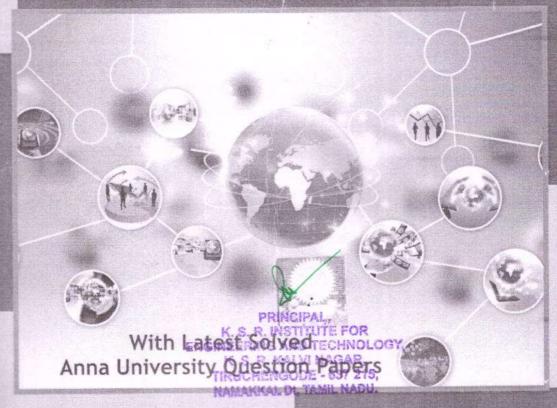
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PREFACE

This book "CS6603 Ad hoc and sensor networks" is designed to cover the new syllabus of 2013 regulation of Anna University-Chennai for Information technology and computer science engineering students. The book is also a mix of various topics and also essential for students throughout their careers.

The first part deals with introduction to wireless communication technology and basis of wireless adhoc ad senor networks. The second part deal with MAC protocols, routing protocols and transport layer protocols in Wireless adhoc networks and the third part deals with MAC protocols, routing protocols in Wireless sensor networks. In addition various issues in designing the wireless adhoc and senor network and QoS are discussed. The book has many significant highlights which includes lot of previous year question papers and question bank for each unit.

The authors takes this opportunity to express their deep gratitude to the Founder & Chairman of KSR educational Institutions Lion Dr.K.S.Rangasamy and Secretary of KSR educational institution Thiru.R.Srinivasan and Dr.M.Venkatesan, Principal of KSR Institute for Engineering and Technology for providing good platform for the preparation of this book. They thank their colleagues, technical staff, relatives and friends for their help and suggestions. They also thank the ARS publisher Mr.Ramesh and his team for their interest and expertise in bringing out this book.

The authors would be happy to receive feedback for further improvement of the book.

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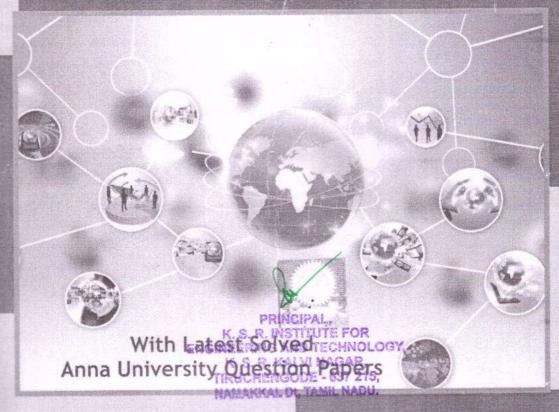
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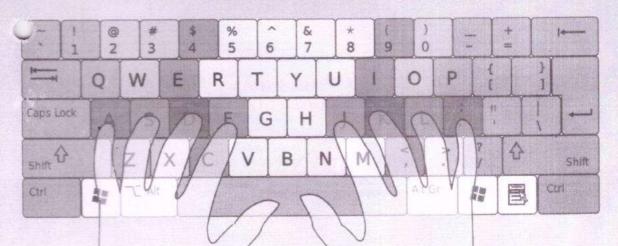
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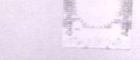
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We would like to express our deep gratitude to our beloved Managing Trustee Mr.R.Srinivasan, for his kind words and enthusiastic motivation in all our endeavors which inspires a lot in completing this book.

We are very much indebted to all our family members and our friends for their invaluable moral support at every stage of our work.

We thank all those who have helped us directly or indirectly in the successful completion of this book.

We would like to express our sincere thanks to A.R. Publications for their support and help in publishing this book in a successful manner.



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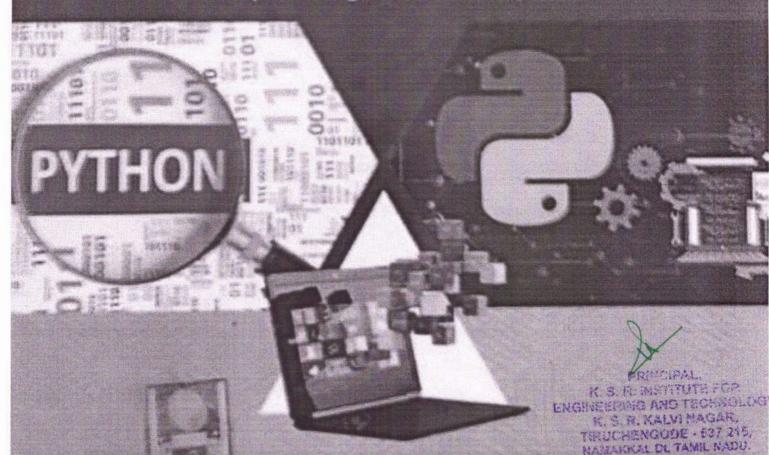


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PREFACE

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The first part deals with **foundations** of Distributed Systems. The second part Introduce the idea of **peer to peer services and file system** and the third part deals with **synchronization**, **replication** and **process & resource management**. The book has many significant highlights which includes lot of **previous year question papers and question bank** for each unit.

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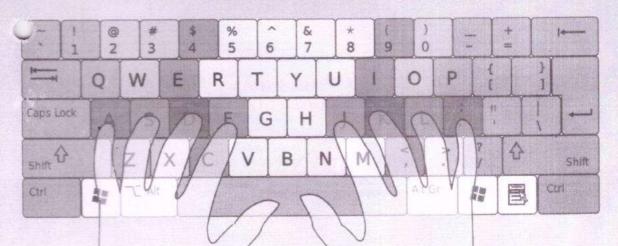


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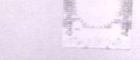
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We would like to express our deep gratitude to our beloved Managing Trustee Mr.R.Srinivasan, for his kind words and enthusiastic motivation in all our endeavors which inspires a lot in completing this book.

We are very much indebted to all our family members and our friends for their invaluable moral support at every stage of our work.

We thank all those who have helped us directly or indirectly in the successful completion of this book.

We would like to express our sincere thanks to A.R. Publications for their support and help in publishing this book in a successful manner.



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ACKNOWLEDGEMENT

First and foremost, we would like to thank God. In the process of putting this book together we realized how true this gift of writing is for us to share our knowledge. You give us the power to believe in our passion and pursue our dreams. We could never have done this without the faith we have in you the Almighty.

We offer our thanks to proprietor of Rtn.Mr.A.Ramesh.

A.R.S. Publications and his Colleagues for their tireless effort in overseeing the production of the book.

Finally, we sincerely thank our Colleagues, Parents, Family, Friends and Well-wishers for their understanding, patience and constant encouragement.

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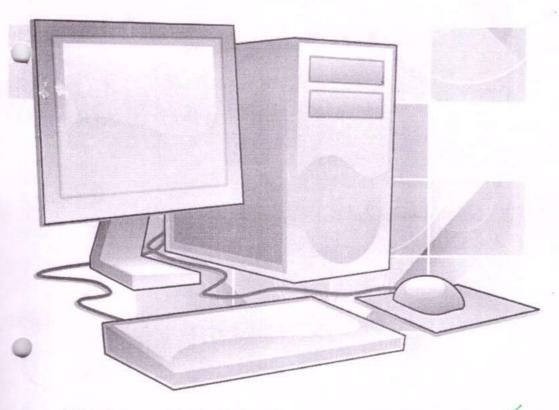
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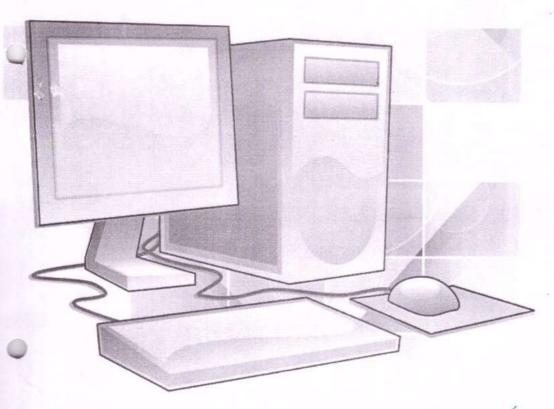
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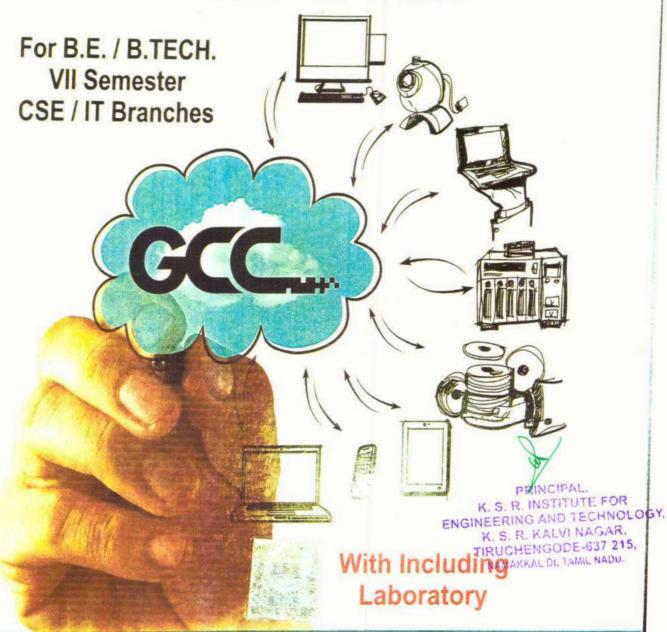
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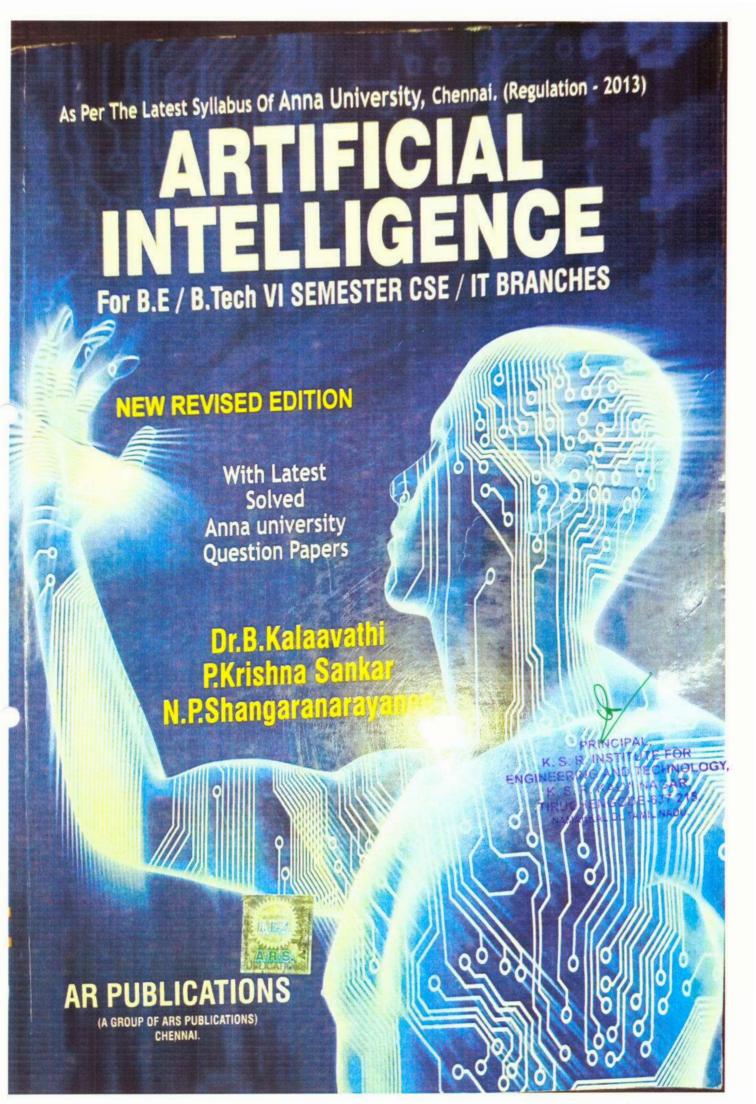
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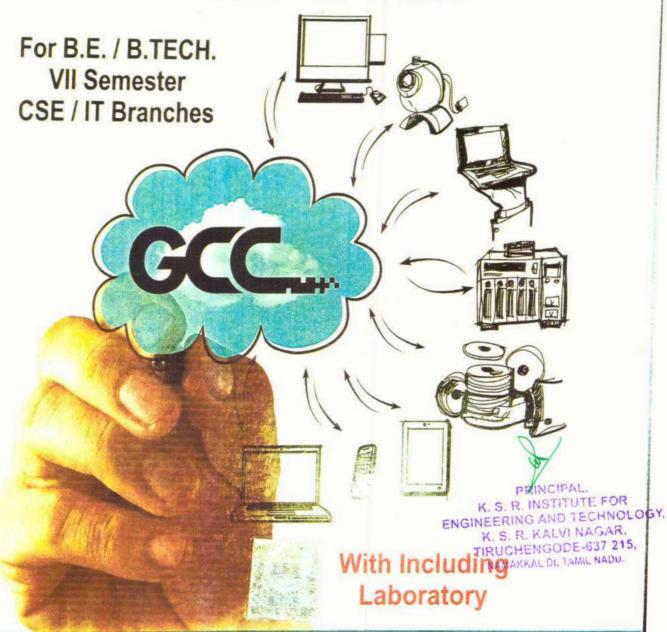
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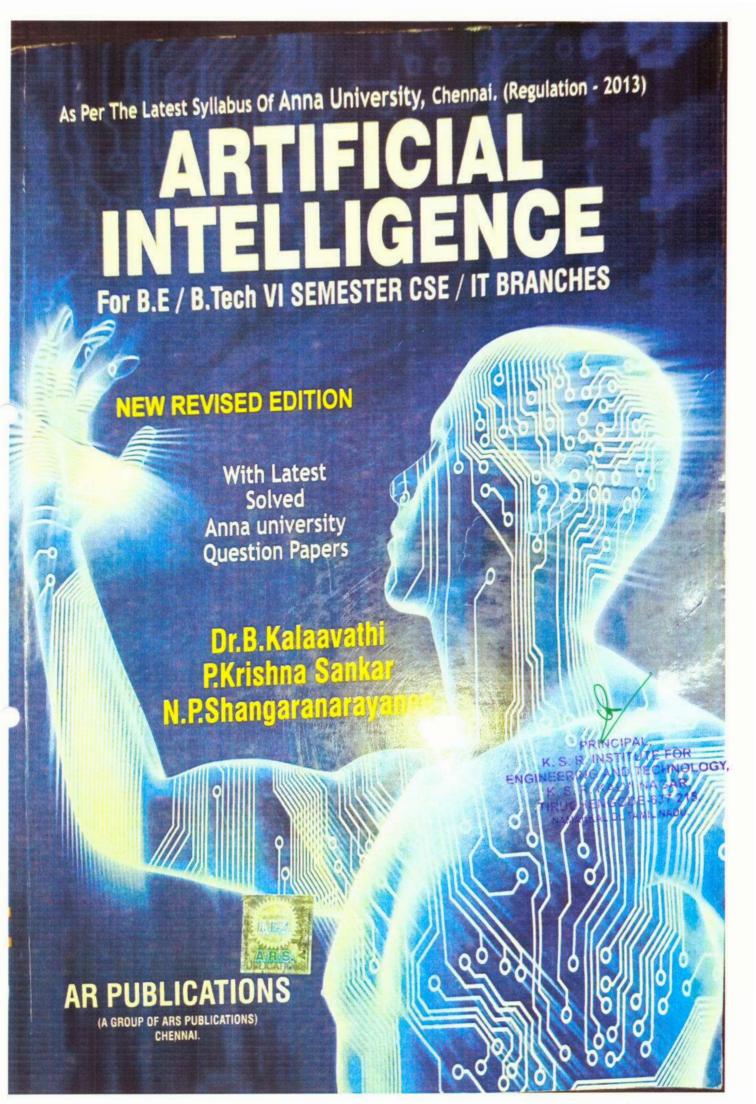
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to find the interesting knowledge from the vast data produced by the health care system

care professional to confirm the quality of the discovered medicine, prescribed treatment

and used to analysis the patterns in large sets of data. Association, clustering, and classification are the tools used to help better exploitation of the data. It helps the health

and the adverse reaction of the drugs.

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Published in: 2016 World Conference on Futuristic Trends in Research and Innovation for Social Welfare (Startup Conclave)

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