Dadi Institute of Engineering & Technology

Approved by AICTE & Permanently Affiliated to JNTUK NAAC Accredited Institute & Inclusion under Section 2(f) & 12(B) of the UGC Act NH-16, Anakapalle, Visakhapatnam-531002, Andhra Pradesh.

(IOTDA-2K21)

17-18 Dec, 2021

Department of Computer Science & Engineering and Electronics & Communication Engineering

> Proceedings of Two Day Online National Conference on Internet of Things : Design & Applications

> > Sponsored by



Chief Patron : Sri Dadi Ratnakar, Chairman Patron : Dr. Challa Narasimham, Principal Convenor : Dr. K. Sujatha, Professor, CSE

> Conference Website Link diet.edu.in/iotda2k21



Content

Description	Pg. No.
Agriculture Applications of Internet of Things: A Survey Comparison of Clustering Algorithm S.Sindhu,L.Arockiam	5
Comparison of Clustering Algorithm RugadaVaikuntaRao,N.Sireesha, Mrs.J.Nalini	6
Structural Health Monitoring Using IoT B Satheesh, VelamuriManasa ,Y.Jaswanth, B. SaiLikitha, K. Sri Sahithi, K.Trivani	7
Sensor Based Frisking P Sireesha, Archana B T, , M. PratyushaJyothi, J. Tallababu, Ch. Harika, G. Madhavi	8
Automatic Smart Irrigation System Using IOT Technology Kishore Buddha, K.Poojitha, G.Pavan, Rahul Kumar, D.Devi , V.N SaiRohini Kumar, D. Jaswanth	9
Optimal Time Table Generation Using Genetic Algorithm N G S Raju, B.G.PoornimaHimaketan, M.Tejasri , K. Komali , T. SaiHarika, R. Lohit Kumar	10
Hydrogen Fuel Cell Based Energy Production for Domestic Appliances A Swetha [,] M.Hemanth Kumar, Suraj Nahak, Manda Sravan Kumar, Vara Prasad	11
Passive Target Tracking Using Sonar Measurements M S B Deepthi, KausarJahan, MallaMounika Naga Lakshmi, Piradula Suresh, Routhulapudi Lalitha Lakshmi S Praveenya, PentakotaSwarjan	12
IoT Based Home Thief Movement Detection and Alerting System Using GSM Technology Matta Sankara Sastry, Srinivasa Rao, N. Prudhivi, P. Jyothi, M. Srinivas, K. Bhagya Lakshmi	13
Wavelet Signal and Image Denoising R. V. S. Lakshmi Kumari , R. Suneel Kumar, B. Pavani, G. Tejasri, Ch. Latha, V.Moulika	14

Design and Implementation of Underground Cable Fault Detector review on control strategies in micro grid to smart R.SrideviAravelli S L K Gopalamma, Kusul Kumar K, N. Srinivas, Sumanth Kumar, S. LaxmanRao	15
No Death in India over Usage of EMS Application SulochanaKengam, M RVSG Guptha, Mr. Raj PavanPolisetti	16
Role of Smart Technique in Irrigation System G Rajasekharam , K. Srinivasarao, S. Srinowshya, G. Manoharsri, B. Pydiraju, J. Yaswanth	17
Study on Green Concrete for the Future Y H PrasannaRaju,B. Sudheerkumar, N. Vamsikrishna, V. Venkatesh	18
Dynamic Electric Vehicle Charging System Ramesh Surisetty,CH Ravi Kumar, P Gnanendra Kumar, V Ganesh, P Teja, V Sai Kumar	19
Switched Reluctance Motor for Hybrid Electric Vehicle using IoT Cloud L.V.Rajesh Kumar, Alfoni Jose K, K.S.S.Jahnavi,K.NarayanaMurthy,M.Savan Kumar, M.S.D kiran	20
Generating Electricity by Using Heating Panel B. V. Suresh, K Vijay Kumar, B P S PrakashRao, B Siva Sai, D S Siva Kumar, B RakeshYadav	21
Health Care System for Home Quarantine People Using Raspberry Pi, GSM and IOT Technology GiridharBabu, Sheik Shabeena, Karri Jayasri, Lanka VenkataSaiTejaswini, AneLokesh, Kobbari Rajesh	22
Covid-19 Fencing and Contact Traceability	23
M.G. Varaprasad [,] A.S.N.Varma [,] T.Divya,P.Yamini ,I.Sreelekhya, K.Teja Smart Power Factor Smart Power Factor Controller G Jyothi, T. Ramesh babu, B.Lohidhar ,E.Mohan,CH. Sri harsha ,K .Vamsikrishna	24
Autonomous Delivery Robot B. Siva Prasad, K.S.N.VSomesheswararao, `K.Mytri,R.Indraja, K.Thriveni, D.Ajay Kumar	25
Accident Detection and Alert System using Arduino A Vasudeva Rao, P. Amrutha, V. Moulika,M.Manju, K.BhagyaDharani, B.Kedharsai	26

A Comprehensive Approach to Develop Pavement Bricks from IoT(Iron Ore Tailings) and Solid Plastic Waste to Generate Green And Cyclic Economy Towards Waste To Wealth Mission Rugada Vaikunta Rao	27
Solar Powered BLDC Motor with HCC Fed Water Pumping System for Irrigation J. Deleep Kumar, S. Sai Kumar	28
A Review on Control Strategies in Micro grid to Smart O. Lakshmi Bhavana, Aravelli S L K Gopalamma	29
Capturing Human Categorization of Natural Images by Combining Deep Networks and Cognitive Model VenkataKalyaniVangapandu, NamrathaPadiyar	30
IOT Applications with Secured Light Weight Cryptography Namratha Padiyar, Venkata KalyaniVangapandu	31
Implementation of Cloud Technology in Education V. Manasa, B.G. Poornima	32
Elliptic Cryptography Curve for Secured Text Encryption Likitha.K, M.Srinivasa Rao	33
Study of Seismic Analysis of Multi Story Buildings With and Without Basement Y Hemanth Kumar	34
Renewable Energy Based Integrated Automated Full Body Sanitizing System B. V. Veeranjaneyulu	35
An Approach for Reconstruction of Unavailable Data in Cloud Storage System Using Partially Distributed File System with Parity Ramaraju. S V S V.P, Komali K	36
Predicting the Hydrogen Storage Capacity of Lithium Doped MWCNTs Nano particles using Machine Learning Techniques	37

Madhavi Konni[,] Soma Sekhar Kadiyala, Challa Narasimham

Vehicle Accident Prevention and Detection System Alfoni Jose K, B V Siva Prasad	38
Appraisal of An Employee's Performance at Work With Reference To Coromandal International Ltd, Visakhapatnam Dr. Rama Kumar P.B., Prof. Dr. Jaladi Ravi, Mr. P. Kiran Kumar	39
Detection of cancer cells using Image processing P.PoornaPriya,S. Harshita ,M. Soujanya,V. Bindu , P. Jhansi	40
A Study on Employees Satisfaction on Welfare & Safety Measures adopted in Power Sector Companies Y. Babji,P.B.RamKumar,A.Kiran Kumar	41
Pattern Synthesis using Fourier Transform Method J Babu, AdariBhargavi,MandapatiPavitra, KoiladaChanakya, Buddha Bhanusree	42
Comparative Study on Text Pre-Processing Techniques SampathiraoSuneetha, Prasanna Kumar Lakineni	43
PAPR Reduction Using Hybrid Ps-Gw Optimization P.Amrutha, Shiva Kumari	44
Design of A Compact Mimo Antenna For Fifth Generation Applications Dr. P. PoornaPriya, B. Sirisha, D. Gowri, S. Mounavi, B. Sravani	45
Measuring Platelet Count by Using contour Aware Segmentation K Vani,R.Suneelkumar ,R.Latha, P.SriRamya, K.Yamini , A.Ramjagan	46
An automatic toll ticketing system using image processing K Vijaya Pasamsa, M.Kishore kumar,Y. Durga lakshmi, B.Maraju, P.harish, S.Tejasri	47

Design of A Compact Mimo Antenna For Fifth Generation Applications

¹Dr. P. PoornaPriya, ²B. Sirisha,² D. Gowri, S. ²Mounavi, ²B. Sravani
¹Associate Professor, Department of ECE, Dadi Institute of Engineering and Technology
^{2,3,4,5}Students, Department of ECE, Dadi Institute of Engineering and Technology
²gowridasu05@gmail.com

Abstract:The proposed MIMO antenna consists of two single antennas, each having size of 13×12.8 mm, symmetrically arranged next to each other. The single and MIMO antennas are simulated and analysed. To verify the simulated results, the prototype antennas were fabricated and measured. The proposed antenna covers the 28 GHz band (27.5–28.35 GHz) allocated by the FCC for 5G applications.

Index terms: MIMO, FCC, 5G