

# 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](http://diet.edu.in/iotda2k21)**



## Content

<b>Description</b>	<b>Pg. No.</b>
<b>Agriculture Applications of Internet of Things: A Survey Comparison of Clustering Algorithm</b> S.Sindhu,L.Arockiam	5
<b>Comparison of Clustering Algorithm</b> RugadaVaikuntaRao,N.Sireesha, Mrs.J.Nalini	6
<b>Structural Health Monitoring Using IoT</b> B Satheesh, VelamuriManasa ,Y.Jaswanth, B. SaiLikitha, K. Sri Sahithi, K.Trivani	7
<b>Sensor Based Frisking</b> P Sireesha, Archana B T, , M. PratyushaJyothi, J. Tallababu, Ch. Harika, G. Madhavi	8
<b>Automatic Smart Irrigation System Using IOT Technology</b> Kishore Buddha, K.Poojitha, G.Pavan, Rahul Kumar, D.Devi , V.N SaiRohini Kumar, D. Jaswanth	9
<b>Optimal Time Table Generation Using Genetic Algorithm</b> N G S Raju, B.G.PoornimaHimaketan, M.Tejasri , K. Komali , T. SaiHarika, R. Lohit Kumar	10
<b>Hydrogen Fuel Cell Based Energy Production for Domestic Appliances</b> A Swetha'M.Hemanth Kumar, Suraj Nahak, Manda Sravan Kumar, Vara Prasad	11
<b>Passive Target Tracking Using Sonar Measurements</b> M S B Deepthi, KausarJahan, MallaMounika Naga Lakshmi, Piradula Suresh, Routhulapudi Lalitha Lakshmi S Praveenya, PentakotaSwarjan	12
<b>IoT Based Home Thief Movement Detection and Alerting System Using GSM Technology</b> Matta Sankara Sastry, Srinivasa Rao, N. Prudhivi, P. Jyothi, M. Srinivas, K. Bhagya Lakshmi	13
<b>Wavelet Signal and Image Denoising</b> R. V. S. Lakshmi Kumari , R. Suneel Kumar, B. Pavani, G. Tejasri, Ch. Latha, V.Moulika	14

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

<b>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</b>	27
Rugada Vaikunta Rao	
<b>Solar Powered BLDC Motor with HCC Fed Water Pumping System for Irrigation</b>	28
J. Deleep Kumar, S. Sai Kumar	
<b>A Review on Control Strategies in Micro grid to Smart</b>	29
O. Lakshmi Bhavana, Aravelli S L K Gopalamma	
<b>Capturing Human Categorization of Natural Images by Combining Deep Networks and Cognitive Model</b>	30
VenkataKalyaniVangapandu, NamrathaPadiyar	
<b>IOT Applications with Secured Light Weight Cryptography</b>	31
Namratha Padiyar, Venkata KalyaniVangapandu	
<b>Implementation of Cloud Technology in Education</b>	32
V. Manasa, B.G. Poornima	
<b>Elliptic Cryptography Curve for Secured Text Encryption</b>	33
Likitha.K, M.Srinivasa Rao	
<b>Study of Seismic Analysis of Multi Story Buildings With and Without Basement</b>	34
Y Hemanth Kumar	
<b>Renewable Energy Based Integrated Automated Full Body Sanitizing System</b>	35
B. V. Veeranjanyulu	
<b>An Approach for Reconstruction of Unavailable Data in Cloud Storage System Using Partially Distributed File System with Parity</b>	36
Ramaraju. S V S V.P, Komali K	
<b>Predicting the Hydrogen Storage Capacity of Lithium Doped MWCNTs Nano particles using Machine Learning Techniques</b>	37
Madhavi Konni Soma Sekhar Kadiyala, Challa Narasimham	

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

## **Role of Smart Technique in Irrigation System**

G Rajasekharam<sup>1</sup> K. Srinivasarao<sup>2</sup>, S. Srinowshya<sup>3</sup>, G. Manoharsri<sup>3</sup>, B. Pydiraju<sup>3</sup>, J. Yaswanth<sup>3</sup>

<sup>1</sup>Associate Professor CSE, NSRIT

Assistant Professor, Dadi Institute of Engineering & Technology, Anakapalle.

Student<sup>3</sup>, Dadi Institute of Engineering & Technology, Anakapalle.

srinowshyanikki2001@gmail.com

**Abstract.** Smart irrigation is an irrigation system that takes into account either the weather or soil conditions to define its watering processes. This means that irrigation is optimized for the particular area that is being watered, and as such water is saved and the growth of the crops or plants is optimized. Conventional water pumps run by electricity tend to be unreliable and diesel pumps have increased fuel cost. Main objective of this study is to present a comprehensive literature review of solar photovoltaic fed water pumping system using brushless dc motor (BLDC). BLDC motor emerges as a better substitute for DC motors and AC induction motors in water pumping applications due to high efficiency, high reliability and least maintenance requirement. The review focuses on research findings of solar photovoltaic water pumping systems using BLDC motor drives with and without DC – DC converters.

**Keywords:** Solar PV based, BLDC motor, Pump irrigation, Prototype.