COLLABORATIVE ACTIVITIES 2020-2021

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TELANGANA STATE POWER GENERATION CORPORATION LIMITED

Nagarjuna Sagar Hydro Electric Scheme
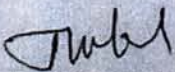
CERTIFICATE

This is to certify that the following student of B.Tech 3rd year Mechanical engineering student of SAGI RAMAKRISHNAM RAJU ENGINEERING COLLEGE, carried out internship and studied " Air ventilation , dewatering and drainage system " for 10 days from 20-01-2021 to 29-01-2021.
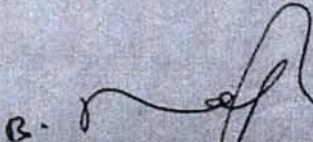
NAME	ROLL NO.
K. SRI VALLABHA SATYA SAI MOULI	18B91A03C8

Training In-charge
Assistant Divisional Engineer
N.S.H.E.S/TSGENCO
Mechanical Maintenance - II
Nagarjuna Sagar Power House
V.P. North - 508 203.

29/01/21

SUPERINTENDING ENGINEER
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PYLON/N.S.H.E.S/TSGENCO SAGAR.

Nagarjuna Sagar

09 July 2021

<u>To Whomsoever It May Concern</u>

This is to certify that Mr./Ms. Tarun Sai Pamulapati EMP ID 10516, has successfully completed the traineeship program in our organization under the Data Analytics practice.

This letter confirms the following details:

Traineeship Start Date: 01 February 2021

Traineeship End Date: 31 May 2021

Designation: Technical Trainee

Please contact TGSHRIndiaOps@teksystems.com for any further clarifications.

for TEKsystems Global Services Pvt. Ltd.

Pawan.S
Manager - Human Resource

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INTERNSHIP
CERTIFICATION

This is to certify that

Kurra Tarun Naga Vinay Sai

has successfully completed an Internship Program Web Development

from 01-08-2020 to 01-10-2020.

During the Internship, the student was found to be

dedicated, hardworking, and diligent.

21-10-2020

DATE

VICE PRESIDENT - HR

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INTERNSHIP
CERTIFICATION

This is to certify that

Trivedula Dhinakar swamy

has successfully completed an Internship Program Web Development

from 01-08-2020 to 01-10-2020.

During the Internship, the student was found to be

dedicated, hardworking, and diligent.

21-10-2020

VICE PRESIDENT - HR

Gnana Analytics Private Limited

Registered Office: 3-43, Lakkavaram, West Godavari District, Andhra Pradesh, 534451

Date: 30-07-2021

TO WHOM SO EVER IT MAY CONCERN

This is to certify that **Mr. Venkata Naveen Aduri** (17B91A1203) Student of Sagi Rama Krishnam Raju Engineering College, has worked as an intern with **Gnana Analytics Pvt Ltd** (Constella Intelligence) from Mar 22, 2021 to Jul 30, 2021.

During the above period, he was engaged in project " **Create Modularized widget UI components using vue.js"** which is a bonafide record of the project work done by him.

We found him to be sincere, committed and diligent.

We wish you all the best for your future assignment.

For Gnana Analytics Pvt Ltd

DocuSigned by:

Vasavi Vandanapu

1F1500F3B5AF4B6...
Vasavi Vandanapu
HR Manager

Office Address: Prestiage Rai Towers, 401, Panjagutta. Hyderabad-500018.
https://constellaintelligence.com/

Gnana Analytics Private Limited

Registered Office: 3-43, Lakkavaram, West Godavari District, Andhra Pradesh, 534451

Date: 30-07-2021

<u>TO WHOM SO EVER IT MAY CONCERN</u>

This is to certify that **Mr. Manoj Kumar Kolli** (17B91A0598) Student of Sagi Rama Krishnam Raju Engineering College, has worked as an intern with **Gnana Analytics Pvt Ltd** (Constella Intelligence) from Mar 22, 2021 to Jul 30, 2021.

During the above period, he was engaged in project " **Create a Proxy service using AWS Technologies like Gateway and Lamda"** which is a bonafide record of the project work done by him.

We found him to be sincere, committed and diligent.

We wish you all the best for your future assignment.

For Gnana Analytics Pvt Ltd

DocuSigned by:

Vasavi Vandanapu

1F1500F3B5AF4B6...

Vasavi Vandanapu
HR Manager

Office Address: Prestiage Rai Towers, 401, Panjagutta. Hyderabad-500018.
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Date: 30-07-2021

TO WHOM SO EVER IT MAY CONCERN

This is to certify that **Ms. Ayyagari Katyayani Devi** (17B91A0420) Student of Sagi Rama Krishnam Raju Engineering College, has worked as an intern with **Gnana Analytics Pvt Ltd** (Constella Intelligence) from Mar 22, 2021 to Jul 30, 2021.

During the above period, she was engaged in project " **Incorporate Automation to support Compliance project"** which is a bonafide record of the project work done by her.

We found her to be sincere, committed and diligent.

We wish you all the best for your future assignment.

For Gnana Analytics Pvt Ltd

DocuSigned by:

Vasavi Vandanapu

—1F1500F3B5AF4B6...

Vasavi Vandanapu
HR Manager

Date: December 3rd, 2019.

Manyam Sivaganesh,
Hyderabad.

Subject: <u>Internship</u>

Dear **Manyam Sivaganesh,**

In reference to your application we would like to congratulate you on being selected for internship with PhenomPeople Pvt Ltd based at Hyderabad. Your training is scheduled to start effective 23rd December 2019 to 12th June 2020. All of us at PhenomPeople Pvt Ltd are excited that you will be joining our team!

As such, your internship will include training/orientation and focus primarily on learning and developing new skills and gaining a deeper understanding of concepts through hands-on application of the knowledge you learned in class.

Stipend would be 20,000 per Month. Work will be on Engineering.

The project details and technical platform will be shared with you on or before commencement of training

Again, congratulations and we look forward to working with you.

Yours sincerely,
for **PhenomPeople Pvt Ltd.**

Shiv Thakur
Manager HR & Admin

Plot No.5 & 6, M.P.Tech Park, White Fields Road, Opp. Ramalayam, Kondapur, Hyderabad, Telangana 500084
Tel: +91 40 2311 9897 Fax: 040 3918 7192 Web: www.phenompeople.com

Page 10

SERC
Software Engg Research Center

INTERNATIONAL INSTITUTE OF INFORMATION TECHNOLOGY
HYDERABAD

CERTIFICATE

— OF —

★ COMPLETION ★

This certificate is awarded to

Pradeep Rayapati

for completing,

the **ONLINE REMOTE DIGITAL INTERNSHIP PROGRAM (RDIP)**

conducted between 22nd June and 22nd July of 2020 by

Software Engineering Research Center (SERC), IIIT Hyderabad

Ramesh Loganathan
Professor, IIIT Hyderabad

Conduira Online

CSE - 17B91A0513

intrinsic
SCIENCE LABS

Date: 02 July 2021

TO WHOMEVER IT MAY CONCERN

This letter is to certify that Ms. **Aruna Kumari Veeramallu** has successfully completed her internship program with our organization "Intrinsic Science Labs" in the Web Development Team. Her internship tenure was across her final semester of Bachelor's Degree in Engineering specialized in Computer Sciences, from *18 March 2021* to *2 July 2021*.

As **Research Intern**, she was actively and diligently involved in the projects and tasks assigned to her. She was actively involved in building essential microservices on server side applications. She is involved in design, development and deployment of the services. In the process she gained knowledge on **Node JS, Docker Containerization** and **Kubernetes**. She has been working under the supervision of *Lohitha Yerrapotu,* a full stack developer working in our organization.

During the span, we found her punctual and hardworking. Her learning powers are good and she picks up swiftly. Her feedback and evaluation proved that she had learned keenly. Moreover, her interpersonal and communication skills are brilliant.

We wish her a bright future.

Sincerely,

JVK Chaitanya Varma,
CTO and Director,
Intrinsic Science Labs

DeltaX

INTERNSHIP EXPERIENCE LETTER

This is to certify that **Gurram Gowri Durga Prasad** , a student of **SRKR College of Engineering** has undergone an internship with us on '**Building Web App using SPAs and Web APIs**' which started on **26thApril 2021** and continued till **6th October 2021**.

During the internship training, the candidate has been trained on **JavaScript, Vue.js, C#, .NET Core, SQL,** and other web technology related concepts while working on the requisite live project.

Internship Duration: 5 months
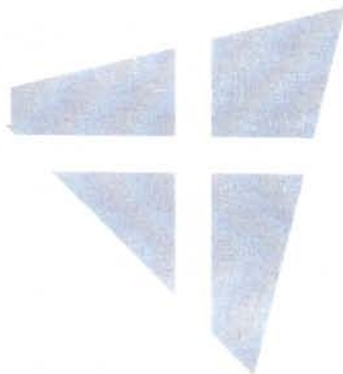Internship Guide: Ankit Ojha, Senior Software Engineer

For AdBox Software Pvt. Ltd

Akshay Surve
Director
19th October, 2021

Cognizant

Dear Yakkanti ,

Greetings from Cognizant !

Glad to let you know that we are graduating you early from the Internship program based on business requirements and prioritize your FTE onboarding process aligned to your performance in the Internship program.

Congratulations on completing your Internship at Cognizant during the period between 24-03-2021 and 16-08-2021.

Your overall performance during Internship has been Satisfactory.

Kindly note your date of joining as full time employee with Cognizant will be on 31-08-2021, subject to completing all your pre joining formalities and background verification documentation requested by us.

We appreciate the passion and professionalism you've exhibited during the Internship. We take this opportunity to wish you all the best and looking forward to work with you soon.

Best Regards,
Human Resources – GenC Program

TATA CONSULTANCY SERVICES

INTERNSHIP CERTIFICATE

This is to certify that

Srihari Poturaju

student of

Sagi Ramakrishnam Raju Engineering College, Bhimavaram

undergoing B.Tech in Computer Science and Engineering

did Remote internship under **Accelerator** brand on the project

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at Tata Consultancy Services Limited, Kolkata from

19-Apr-21 to 24-Jun-21

and completed the project work satisfactorily under the

guidance of M Ameenudeen

Chandra Koduru
Head – Academic Interface Programme

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Control and Optimization of DC Microgrid Power Management with Energy Storage Devices and Photovoltaic System

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G Bharathi ; P Kantarao ; R Srinivasarao   **All Authors**

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2018 IEEE International Conference on Automation/XXIII Congress of the Chilean Association of Automatic Control (ICA-ACCA)

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2021 20th International Symposium INFOTEH-JAHORINA (INFOTEH)

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II. Control Method to Energy Systems for Equalizing Stored Energy

III. Anfis Model

IV. Tlbo Algorithm

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Authors

Abstract: In this work, a novel control strategy is designed for integrating the hybrid distributed energy sources (DGs) into the DC microgrid system for enhancing the reliability ... **View more**

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Abstract:

In this work, a novel control strategy is designed for integrating the hybrid distributed energy sources (DGs) into the DC microgrid system for enhancing the reliability of the system. The photovoltaic (PV) system is incorporated into the DC microgrid with super capacitor (SC) for improving the system performance at uncertainties in weather conditions. Further, adaptive neuro-fuzzy inference system is presented to regulate the voltage and sustain the power matching to load demand. Nevertheless, the accuracy and correctness of the system does not reach the optimal level due to low speed, takes more time for run. In this study, teaching learning-based optimization (TLBO) is utilized for tuning the adaptive neuro-fuzzy inference system (ANFIS) with the integration of DGs into DC microgrid system. In order to determine the effectiveness of the TLBO-based ANFIS, the system has been checked by

VOLTAGE SOURCE BASED HVDC WITH FACTS AS ANCILLARY CONTROLLER USING FUZZY LOGIC CONTROLLER

PRABHAKARA SHARMA. P[1], P. KANTA RAO[2], and K. VAISAKH[3]

[1]Associate Professor, Department of Electrical & Electronics Engineering, Kallam Haranadhareddy

Institute of Technology (A), Chowdavaram, Guntur, Andhra Pradesh, India.

[2]Professor, Department of Electrical & Electronics Engineering, SRKR Engineering College (A),

Bheemavaram, Andhra Pradesh, India.

[3]Professor, Department of Electrical Engineering, Andhra University College of Engineering (A),

Visakhapatnam, Andhra Pradesh, India.

E-mail: [1]prabhakarasharma@gmail.com, [2]dr.pkantarao@gmail.com, [3]prof.dr.vaisakh.k@gmail.com

ABSTRACT

Increasing demand of energy becomes major issue in emerging technology to deliver cost effective electrical power. By using HVDC systems we can achieve transmission of power over long distance with minimal losses with utilization of proper controller like flexible alternating current transmission (FACTS) devices. The main application of HVDC system is large amount of power transfer over long distance with view of reliability, cost and technical performance. FACTS devices are composed of static equipment utilized for increase power transfer capability and enhancing controllability of line. It consists of advance power electronic devices with combination of series and shunt converter called UPFC for facilities fast acting reactive power compensation in tie lines of HVDC network. The proposed system identifies improved power transmission capability through conventional and advance control schemes, simulation study is made with application of PI and Fuzzy logic based UPFC on HVDC network. The conventional controller cannot compensate power fluctuations and time constant of active and reactive power which is integrated in controller of UPFC [2]. The system model is analyzed for various fault conditions by maintain UPFC fixed which reduces the magnitude of the fault current and oscillations in excitation voltage.

Keywords: *High-voltage dc transmission (HVDC), Faults in HVDC system, Flexible ac transmission system (FACTS), PWM Power transfer controllability, Fuzzy Logic Controller.*

1. INTRODUCTION

HVDC system built up with one or two converters with 12 pulse converter. Based on the configuration of system HVDC may begin monopolar or bipolar or homopolar system [1-3]. In certain cases where bipolar system may build by two converters in series configuration for enhancing power transfer capability and improve voltage profile [10]. It is not that easy to connect parallel converter in case of single pole configuration. Each pole is equipped properly with dc filters and reactors to reduce harmonic in lines and improve reliability of the system. Also HVDC system consists of jointly connected converter combination. Fig.1 shows monopolar HVDC system linking both converters with earth electrode, which are installed away from the converter station equipment.
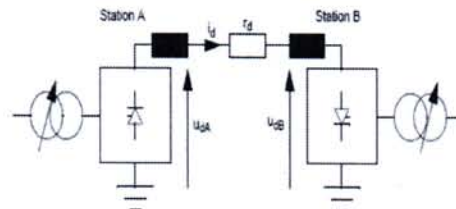

Fig.1. HVDC Transmission System With Monopolar Configuration.

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Fuzzy logic control (FLC)-based coordination control of DC microgrid with energy storage system and hybrid distributed generation

G. Bharathi[a,b], P. Kantharao[c] and R. Srinivasarao[a]

[a]Department of Electrical & Electronics Eng., JNTU Kakinda, Kakinada, AP, India; [b]Shri Vishnu Engineering College for Women, Department of Electrical & Electronics Engineering, Bhimavaram, AP, India; [c]Department of Electrical & Electronics Eng., SRKR College, Bhimavaram, AP, India

ABSTRACT

The developed and developing countries are going to install a number of distributed generations (DGs) with lucrative incentives. In recent years, DC microgrids have got remarkable popularity throughout the world due to dc output sources, namely, batteries, solar panels, and fuel cells are interconnected without the presence of ac/dc conversion. In this paper, the photovoltaic (PV) system is proposed with the fuel cell (FC) and battery bank in the micro-gird system at various dynamic conditions. Besides, fuzzy logic controller is suggested to regulate the bus voltage and retain the power balance. In order to ascertain the effectiveness of the suggested control approaches, the system has been verified with various dynamic conditions like 50% changes in AC and DC loads, irradiance variations, overloading situations and the battery bank functioning when the change in FC is observed. The simulation outcomes disclose that the fuzzy-based proposed method renders better dynamic performances with proposed energy storage systems.

1. Introduction

Most of the countries deployed the distributed energy technologies in the electrical scenario for contributing to the reliable power supply to consumers. Thus, distributed generating sources (DGs), such as solar, wind, hydropower, present a momentous role in electrical industry (Mehta, Bhatt, and Pandya 2018; Fang and Yang 2019; Karimi, Atashbar, and Najafi Ravadanegh 2020). Recently, the developed and developing countries are giving a huge amount of incentives over power generation through renewable energy sources. Since the power production is through the sustainable sources, such as wind, solar, hydro and biomass, which do not harm the environmental conditions and alleviations in greenhouse gas. Moreover, the majority area of the earth surface has been enclosed with oceans and seas. Hence, the maximum amount of electrical energy is generated by the wind in sea areas (Vinoth Kanna, Tamil Selvan and Pinky 2018; Ben Hassen et al. 2019; Peddakapu et al. 2020).

As the power is generated by DGs, it is formed as a small-scale power sector (DC microgrid) and it is tied to the main grid. The DC micro-grids can provide uninterrupted power supply during normal and abnormal circumstances. Typically, DC power would be employed in data centres and other communicational buildings where great quality power is required (Tenti, Paredes, and Mattavelli 2011; Malik et al. 2017). Kakigano et al. (2008) suggested the bipolar-type low-voltage dc microgrid and illustrated the operating, working and other control approaches. Likewise, they penetrated one energy storage (ES) unit in DC microgrid with dc/dc converter station for maintaining the reliable dc bus voltage at intentional islanding operation. Nevertheless, one ES

unit would not give better efficiency and not enough to send more power at dynamic loading situations.

Various droop control approaches are implemented in ac/dc microgrids for conducting the parallel coordination (Boroyevich, Xing, and Lee 1999; Tang and Lasseter 2000; Ito, Zhongqing, and Akagi 2004; Mohamed and El-Saadany 2008). For equalising the power generation and required load demand at diverse dynamic and static conditions, different kinds of power management sources should be utilised in the grid system. Therefore, in this study, two ES units, such as fuel cell (FC) and battery, are proposed for power management and retain the reliable dc voltage at distinct operating conditions. The ES will be desired for not only to achieve the optimal abilities of the grid at different loading situations, but also to accelerate the renewable sources like wind, hydro and solar. The configuration of PV and battery proposes an off-the shelf energy solution with a wield area of applications and a considerable research literature (Shah, Mundada, and Pearce 2015). On the other hand, hydrogen (H2) storage batteries also have been examined, but utilisation is less due to high cost of liquid H2 (Al-Sharafi et al. 2017). Recent evidence suggests that the batteries can be used to store the electricity and hydrogen; however, they are not about to meet the economic and technical standards for traditional and novel applications in the grid system. Hence, the coordination of batteries and FCs is to be worked for satisfying the power equalisation under various load circumstances. In addition to transferring the power between two suggested ES units, the proper control scheme is needed to be analysed with the ES unit for successful operation (Kakigano, Miura, and Ise 2010).

CONTACT G. Bharathi ✉ gudelubharathi@gmail.com

This article has been republished with minor changes. This change do not impact the academic content of the article.

RESEARCH ARTICLE

WILEY

Improved power quality with an adaptive grid-forming inverter control scheme in solar PV system

Anantha Koteswara Rao Dadinaboina[1,2] | Kantha Rao Pedakota[2] |
Sasi Chinnathambi[1] | Rajasekhar Reddy Senige[1,2]

[1]Department of Electrical Engineering, Annamalai University, Chidambaram, India

[2]Department of Electrical and Electronics Engineering, SRKR Engineering College, Bhimavaram, India

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Anantha Koteswara Rao Dadinaboina, Department of Electrical Engineering, Annamalai University, Chidambaram, Tamil Nadu, India.
Email: ananthkoti@srkrec.ac.in

Handling AE: Dr. Guan, Yueshi

Summary

In this paper, an improved fractional order notch filter (IFONF)-based grid-forming inverter control scheme is employed to mitigate the harmonics in photovoltaic system applications. Moreover, a fuzzy gain tuning proportional-integral-derivative (FTPID) controller is developed for the dc-link voltage to maintain its reference value. The proposed FTPID-IFONF control scheme is executed to evaluate the active fundamental weight components (FWC) of the load currents and distorted grid voltages consequently generates the PWM pulses to the grid-forming inverter for power quality enrichment in a grid integration with photovoltaic applications. The integer order based filters have some constraints due to differentiator term and fixed integrator. For this reason, an improved design of an integer order notch filter is suggested in the proposed FTPID-IFONF controller scheme. The behavior of the proposed FTPID-IFONF control scheme is found good in-terms of elimination of dc offset, grid-synchronization, separation of fundamental components, adaptive behavior and harmonic elimination at the consumer terminals. The proposed controller is validated under several load and grid dynamic conditions such as steady-state, grid voltage sag-swell, distorted, load dynamic and removed conditions on MATLAB/Simulink platform. A prototype PV integrated with grid setup is constructed to validate the proposed system in the real-time. The FTPID-IFONF control scheme is well justified under several grid and load dynamic conditions and the harmonic distortions of the grid characteristics are found well based on the limits of IEEE-519 standards. A comparative study is also analyzed to show the effectiveness of the controller with recently published works.

List of Symbols and Abbreviations: ANF, Adaptive notch filter; AANF, Amplitude Adaptive notch filter; DSOGI, Dual second order generalized integrator; ESN, Echo state network; FTPID, Fuzzy tuning proportional Integral derivative; FWC, Fundamental component extraction; IFONF, improved fractional order notch filter; IRP, Instantaneous reactive power; ISC, Instantaneous symmetrical component; ISOGI, Improved second order generalized integrator; LMF, Least mean fourth; LMS, Least mean square; MFOGI, Multi, layer fifth order generalized integrator; MPPT, Maximum power point tracking; MSOGI, Multiple second order generalized integrator; MROGI, Modified Reduced order generalized integrator; NLMS, Normalized least mean square; PSO, Particle swarm optimization; PV, Photovoltaic; ROGI, Reduced order generalized integrator; RPGS, Renewable power generation systems; SAPF, Shunt active power filter; SOGI, Second order generalized integrator; SRF, Synchronous reference frame; THD, Total harmonic distortion; UPF, Unity power factor.

ORIGINAL ARTICLE

Optimal Power Management of an Educational Institution Using HOMER

Pothula Jagadeesh[1,2] · M. Mohamed Thameem Ansari[1] · M. Saiveerraju[2]

Abstract

This paper presents power management of an educational institution which is located in Bhimavaram, India. The institution is assumed as commercial load which is fed from an 11KV line the load deviations are mainly considered throughout the day time merely because of the institution's working hours. This optimization comes with a bidirectional power flow from institution to the grid and grid to the institution. With a renewable power generation of solar plant with 100 kW generation the optimal power utilization is proposed such that the effective usage of renewable energy increases and the usage of fossil fuel-based generators decrease. In homer software the optimization of the given projected system is accomplished through simulation.

1 Introduction

Population growth and technological development, particularly in the electricity sector, have led to increasing energy consumption over the last years. In addition, many rural and remote regions have no access to electrical power, particularly in developing countries. Electricity generation should be increased in order to resolve given problems. Today, fossil fuels source a great proportion of the world's electricity. However, since of their problems in economic and environmental field, future electricity requirements cannot meet these resources. Renewable energies have provided effective alternatives to the resources of fossil-fuel. Even if these services are in usage to supply local charges exclusively, several difficulties arise due to their intermittent and uncertain nature, like high investment costs along with low supply security. The Hybrid Renewable Energy Systems (HRESs) idea has arisen to address given problems. In order to come across the load locally mutually networks are connected and independent, HRES is a merging from renewable, energy as well as energy storage resources. In the remote and rural areas the HRESs are utilized in standalone mode. In this way as the backup resources, traditional energy resources along with energy storages could be in usage on behalf of them, because of the non-deterministic nature of the renewable resources. In fact, the remainder of the load can be delivered by the support resources during periods where the renewable resources output is not adequate to access the load. At the other side, additional energy may be captured by energy storage when the renewables have additional generation. Recognitions to the HRESs, renewable power systems in standalone mode are more robust than just. In certain places, like as cities, hospitals, universities, and factories, HRESs are used for grid associated operations. When grid energy prices are low, in this mode the HRES come across the grid load also charges storages of renewable energy. Then with its resources HRES run into the load and trades extra energy towards the grid in the times during which the prices of the grid electricity are high.

Energy storages are therefore discharged to fulfill the load then to trade energy towards the grid. In the HRES mode only renewable energy systems are more economical. Consequently, HRES presents certain characteristics, like as raising the renewable energy's penetration, reducing the cost of energy (CoE), reducing greenhouse gas emissions, and granting people in remote as well as rural areas access to electricity. These benefits come across complete three

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[2] Department of EEE, SRKR Engineering College, Bhimavaram 534204, Andhra Pradesh, India

Ⓓ Springer

(12) PATENT APPLICATION PUBLICATION   (21) Application No.202141053224 A

(19) INDIA

(22) Date of filing of Application :18/11/2021   (43) Publication Date : 03/12/2021

(54) Title of the invention : EARLY DETECTION FOR ALZHIEMER DISEASE USING MACHINE LEARNING APPROACH

(51) International classification	:G06K0009620000, G06F0040300000, G06K0009460000, G06F0017180000, G06T0007143000	(71)Name of Applicant : 1)Dr. B V D S SEKHAR Address of Applicant :ASSOCIATE PROFESSOR, DEPARMENT OF IT, SRKR ENGINEERING COLLEGE BHIMAVARAM, WEST GODAVARI DISTRICT, AP, INDIA 534204 ----------- -----------
(86) International Application No Filing Date	:NA :NA	Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : 1)Dr. B V D S SEKHAR Address of Applicant :ASSOCIATE PROFESSOR, DEPARMENT OF IT, SRKR ENGINEERING COLLEGE BHIMAVARAM, WEST GODAVARI DISTRICT, AP, INDIA 534204 ----------- -----------
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(61) Patent of Addition to Application Number Filing Date	:NA :NA	3)Prof. BH. V S R K RAJU Address of Applicant :PROFESSOR & HEAD, DEPARMENT OF IT, SRKR ENGINEERING COLLEGE BHIMAVARAM, WEST GODAVARI DISTRICT, AP, INDIA 534204 ----------- -----------
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(57) Abstract :

Early detection for Alzheimer disease using machine learning approach. we will improve the way use that semantic similarity for relevant data from close accommodations to train the model. a new numerically method was introduced for finding the maximum a posterior estimation by using Expectation Maximization and Gaussians mixure distribution. In this algorithm, a sequence of priors was made posteriors were made and then converged to a posterior probability that is called the reference posterior probability, which can make labeled MRI/PET image. This labeled image shows segmented MRI/PET image with reduced noises. Improvisations in the utilization of semantic similarities will provide adequate close accommodations to train the model.

No. of Pages : 19 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :06/11/2021

(21) Application No.202141050903 A

(43) Publication Date : 03/12/2021

(54) Title of the invention : SYSTEM AND METHOD FOR CREATING & MANAGING MIND MAP FOR EXPLAINING USER THOUGHTS USING PERSONALIZED NETWORK

(51) International classification :G09B0019000000, G03G0015080000, G09B0007000000, G06F0016210000, G07C0003000000	(71)Name of Applicant : 1)Dr. B V D S SEKHAR Address of Applicant :ASSOCIATE PROFESSOR, DEPARMENT OF IT, SRKR ENGINEERING COLLEGE BHIMAVARAM, WEST GODAVARI DISTRICT , AP, INDIA 534204 ----------- ----------- 2)Prof. P V G D PRASAD REDDY 3)Dr. S VENKATARAMANA 4)Prof. BH. V S R K RAJU 5)Prof. N UDAY KUMAR 6)Dr. VEDULA. V.S.S. SAMEER CHAKRAVARTHY 7)Dr. P.SATISH RAMA CHOWDARY 8)Dr. BALAKA RAMESH NAIDU 9)Dr. CHINTA SOMESWARARAO Name of Applicant : NA Address of Applicant : NA
(86) International Application No :NA Filing Date :NA	(72)Name of Inventor : 1)Dr. B V D S SEKHAR Address of Applicant :ASSOCIATE PROFESSOR, DEPARMENT OF IT, SRKR ENGINEERING COLLEGE BHIMAVARAM, WEST GODAVARI DISTRICT , AP, INDIA 534204 ----------- ----------- 2)Prof. P V G D PRASAD REDDY Address of Applicant :VICE CHANCELLOR , ANDHRA UNIVERSITY, VISAKHAPATNAM, AP, INDIA ----------- -----------
(87) International Publication No : NA	3)Dr. S VENKATARAMANA Address of Applicant :ASSOCIATE PROFESSOR, DEPARTMENT OF IT, SRKR ENGINEERING COLLEGE BHIMAVARAM, WEST GODAVARI DISTRICT, AP, INDIA-534204 ----------- -----------
(61) Patent of Addition to Application Number :NA Filing Date :NA	4)Prof. BH. V S R K RAJU Address of Applicant :PROFESSOR & HEAD , DEPARMENT OF IT, SRKR ENGINEERING COLLEGE BHIMAVARAM, WEST GODAVARI DISTRICT , AP, INDIA 534204 ----------- -----------
(62) Divisional to Application Number :NA Filing Date :NA	5)Prof. N UDAY KUMAR Address of Applicant :PROFESSOR & HEAD, DEPARMENT OF ECE, SRKR ENGINEERING COLLEGE BHIMAVARAM, WEST GODAVARI DISTRICT , AP, INDIA 534204 ----------- ----------- 6)Dr. VEDULA. V.S.S. SAMEER CHAKRAVARTHY Address of Applicant :PROFESSOR, DEPARMENT OF ECE, RAGHU INSTITUTE OF TECHNOLOGY, VISAKHAPATNAM , AP, INDIA ----------- ----------- 7)Dr. P.SATISH RAMA CHOWDARY Address of Applicant :PROFESSOR & VICE PRINCIPAL, DEPARMENT OF ECE, RAGHU INSTITUTE OF TECHNOLOGY, VISAKHAPATNAM , AP, INDIA ----------- ----------- 8)Dr. BALAKA RAMESH NAIDU Address of Applicant :ASSOCIATE PROFESSOR, ADITYA INSTITUE OF TECHNOLOGY AND MANAGEMENT, TEKKALI, SRIKAKULAM, ANDHRA PRADESH ----------- ----------- 9)Dr. CHINTA SOMESWARARAO Address of Applicant :ASSISTANT PROFESSOR , DEPARMENT OF CSE, SRKR ENGINEERING COLLEGE BHIMAVARAM, WEST GODAVARI DISTRICT , AP, INDIA-534204 ----------- -----------

(57) Abstract :
System and method for creating & managing mind map for explaining user thoughts using personalized network wherein the invention focuses on developing a device and method for writing mind maps for their thoughts using random inputs and personalized data. A mind map is a colorful and visual representation of hierarchical information that includes a key concept and core idea of the first person and it is surrounded by connected branches of associated topics for the best way of explanation. It can be used as an effective tool to understand and learn complicated concepts, perceive the interlinking between the sub-concepts as well as a revision tool. The invention has at least one processer, one display and other necessary components to run the apparatus. The invention has AI for comparing present random inputs and user's past actions; wherein the comparison and AI decision process gives output in the monitor will be most likely what user wants to do.

No. of Pages : 19 No. of Claims : 5

(12) PATENT APPLICATION PUBLICATION   (21) Application No 202141012346 A

(19) INDIA

(22) Date of filing of Application :23/03/2021   (43) Publication Date : 26/03/2021

(54) Title of the invention : AN IOT BASED SYSTEM FOR INSTINCTIVE STOPPING ALERT TO DRIVERS USING ON PASSENGER TICKET

(51) International classification	:G08G0001133000, G08G0001123000, B60Q0009000000, B61L0003000000, B60N0005000000	(71)Name of Applicant : 1)Dr. POKKULURI KIRAN SREE Address of Applicant :S/o. P RAMACHANDRA MURTHY, PROFESSOR & HEAD - DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, SHRI VISHNU ENGINEERING COLLEGE FOR WOMEN, BHIMAVARAM 534202, ANDHRA PRADESH, INDIA Andhra Pradesh India
(31) Priority Document No	:NA	(72)Name of Inventor :
(32) Priority Date	:NA	1)Dr. POKKULURI KIRAN SREE
(33) Name of priority country	:NA	2)Dr. V PURUSHOTHAMA RAJU
(86) International Application No	:NA	3)Dr. RAMACHANDRA RAO KURADA
Filing Date	:NA	4)AALURI SEENU
(87) International Publication No	: NA	5)P R SUDHA RANI
(61) Patent of Addition to Application Number	:NA	6)P J R SHALEM RAJU
Filing Date	:NA	7)POTHURAJU RAJU
(62) Divisional to Application Number	:NA	8)MOHAN RAM GARSUKUTI
Filing Date	:NA	9)M V V RAMA RAO 10)KESAVA TALUPURI

(57) Abstract :

Sometimes conductor may forget to instruct the driver for stopping or if there is no conductor in the bus the driver itself should get to know where the passenger is going to get down. To overcome or to resolve this problem here is the invention with some extra additional system that helps to driver comfort. Also, this invention covers the entire process from start entering passengers inside the bus, it monitors the ticketing gadget which is in the conductor's hands. When passengers buying tickets, the number of tickets and next stop information is will be notified and displayed in front of the driver. The system identifies the distance of the next bus stop and the current location will be located with the help of the GPS module. The system communicates with GSM and local wireless connection networks.

No. of Pages : 10 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :16/11/2021

(21) Application No.202141052568 A

(43) Publication Date : 03/12/2021

(54) Title of the invention : DISASTER RELIEF VEHICLE USING ROCKER BOGIE MECHANISM

(51) International classification	:A61K0036740000, H01P0001213000, B66B0005020000, E03F0005100000, A63F0003000000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

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(57) Abstract :
An incident took place in June 2014 in Chennai, India where a 12 storey building collapsed which led to a severe loss of human life due to an inadequate facility in the rescue operation. Similarly, in December 2015, the southeast of India, Chennai has been through a destructive flood due to heavy rains leading to massive damages and has been responsible for many irredeemable losses to both lives and properties. The flooding along with huge quantities of water also carries dirt, trees, and derbies from along their path. This damages the roads and standing structures, leaving the roads unusable. In these circumstances, the relief teams that bear the aids required during post relief missions find it is difficult to access these places. This invention here develops an insightful idea to overcome the complications faced during these critical life-saving operations.

No. of Pages : 8 No. of Claims : 4

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141031030 A

(19) INDIA

(22) Date of filing of Application :10/07/2021

(43) Publication Date : 16/07/2021

(54) Title of the invention : TEACHABLE OXYGEN FLOW CONTROL AND MONITORING SYSTEM

(51) International classification	:A61M0016060000, A61M0016100000, A61B0005000000, A61M0016000000, A61B0005024000	(71)Name of Applicant : 1)Ravuri Daniel Address of Applicant :AssociateProfessor, Departmentof Computer Science and Engineering, Bapatla Engineering College, Bapatla 522101, Andhra Pradesh, India Andhra Pradesh India
(31) Priority Document No	:NA	2)Ratna Sunil Buradagunta
(32) Priority Date	:NA	3)Pitta Sundara Kumar
(33) Name of priority country	:NA	(72)Name of Inventor :
(86) International Application No	:NA	1)Ravuri Daniel
Filing Date	:NA	2)Ratna Sunil Buradagunta
(87) International Publication No	: NA	3)Pitta Sundara Kumar
(61) Patent of Addition to Application Number	:NA	4)Bode Prasad
		5)Domala Kishore Babu
Filing Date	:NA	6)Teki Satyanarayana Murthy
(62) Divisional to Application Number	:NA	7)Prudhvi Kiran Pasam
Filing Date	:NA	

(57) Abstract :

The present invention discloses a teachable system that learns by itself through data acquisition from the patients, dynamically monitors, analyses and controls the oxygen flow to the patients suffering from hypoxia. The disclosed system contains hardware that includes oxygen concentrator, oxygen flow and pulse rate measuring sensors, a control system, oxygen demand display unit and motors to control the valves. All the components of the system are integrated with an Artificial Intelligent (AI) agent. The data of oxygen levels and pulse rate of the patient is continuously supplied to the AI agent and the oxygen demand is predicted. Then the AI agent takes appropriate decision to decrease or increase the flow of the oxygen by controlling the flow valves to supply appropriate amount of oxygen to the patient. The AI agent also displays the analytics of oxygen consumption by the patient on the monitor which helps to assess the recovery rate of the patient and health condition of the patient.

No. of Pages : 23 No. of Claims : 6

(12) PATENT APPLICATION PUBLICATION   (21) Application No.202141051706 A

(19) INDIA

(22) Date of filing of Application :11/11/2021   (43) Publication Date : 26/11/2021

(54) Title of the invention : AN AI & ML BASED SYSTEM FOR FABRICATING POWER VLSI DIODE DEVICES AND METHOD THEREOF

(51) International classification : H01L0029060000, H01L0029780000, H01L0021560000, H01L0029660000, H01L0029861000	(71)Name of Applicant : 1)Dr S.Venkataramana Address of Applicant :Associate Professor, Department of Information Technology, S.R.K.R. Engineering College, China Amiram, Bhimavaram, West Godavari District, Andhra Pradesh, India. Pin Code:534204 ---------- ---------- 2)Mr.Narveer Singh 3)Dr.Divya Gampala 4)Dr.N.Shribala 5)Dr.A.Sathishkumar 6)Dr.B.V.D.S.Sekhar 7)Dr.Sushma Jaiswal 8)Mr.Tarun Jaiswal 9)Ms.Kanakaprabha.S 10)Dr.S.Ravichandran Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : 1)Dr S.Venkataramana Address of Applicant :Associate Professor, Department of Information Technology, S.R.K.R. Engineering College, China Amiram, Bhimavaram, West Godavari District, Andhra Pradesh, India. Pin Code:534204 ---------- ---------- 2)Mr.Narveer Singh Address of Applicant :PG Student, Electrical Engineering, Deen Bandhu Chhotu Ram University of Science and Technology, Murthal (DCRUST), Sonipat, Haryana, India. Pin Code:131001 ---------- ---------- 3)Dr.Divya Gampala Address of Applicant :Associate Professor, Department of ECE, CMR Engineering College, Medchal, Hyderabad, Telangana, India. Pin Code:501401 ---------- ---------- 4)Dr.N.Shribala Address of Applicant :Associate Professor, Department of Electronics and Communication Engineering, Matrusri Engineering College, Saidabad, Hyderabad, Telangana, India. Pin Code:500059 ---------- ---------- 5)Dr.A.Sathishkumar Address of Applicant :Associate Professor, Department of ECE, The kavery Engineering College, Mecheri, Tamil Nadu, India. Pin Code:636453 ---------- ---------- 6)Dr.B.V.D.S.Sekhar Address of Applicant :Associate Professor, Department of Information Technology, S.R.K.R. Engineering College, China Amiram, Bhimavaram, West Godavari District, Andhra Pradesh, India. Pin Code:534204 ---------- ---------- 7)Dr.Sushma Jaiswal Address of Applicant :Assistant Professor, Department of Computer Science & Information Technology (CSIT), Guru Ghasidas Vishwavidyalaya (A Central University), Koni, Bilaspur, Chhattisgarh, India. Pin Code: 495009 ---------- ---------- 8)Mr.Tarun Jaiswal Address of Applicant :Research Scholar, Department of Computer Application, National Institute of Technology (NITRR), Raipur, Chhattisgarh, India. Pin Code:492010 ---------- ---------- 9)Ms.Kanakaprabha.S Address of Applicant :Assistant Professor, Department of CSE, Rathinam Technical Campus, Eachanari, Coimbatore, Tamil Nadu, India. Pin Code:641021 ---------- ---------- 10)Dr.S.Ravichandran Address of Applicant :HOD & Professor in M.Sc.- Computer Science Department, Shree Chandraprabhu Jain College, Minjur, Chennai, Tamil Nadu, India. Pin Code:601203 ---------- ----------
(86) International Application No :NA Filing Date :NA	
(87) International Publication No : NA	
(61) Patent of Addition to Application Number :NA Filing Date :NA	
(62) Divisional to Application Number :NA Filing Date :NA	

(57) Abstract :

[034] The present invention discloses an AI & ML based system for fabricating power VLSI diode devices and method thereof. The method and system includes, but not limited to, a VLSI compatible substrate; a buried layer provided in the VLSI compatible substrate; a cathode region in the VLSI circuitry, further comprising a high-voltage lightly doped drain in the VLSI compatible substrate; a well surrounding high-voltage lightly doped drain and a doping region in the well and surrounding the high-voltage lightly doped drain communicatively coupled with an anode region in the VLSI circuitry surrounding the cathode region in the VLSI circuitry; and a guard ring surrounding the anode region and connected to the buried layer. Accompanied Drawing [FIG. 1]

No. of Pages : 23 No. of Claims : 7