



**SKCET**  
**Buzz**

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## PRINCIPAL MEETING WITH HODS



Principal Madam convened a meeting with Heads of various departments to discuss the academic activities pertaining to CIA and preparedness of NAAC, NIRF and ARIIA.



## CIVIL - OUTSIDE CLASSROOM LEARNING



As a part of **Outside Classroom Learning Experience**, Pre- final year students from the Department of **Civil Engineering** visited **Sree Daksha " Arcis "** - a residential apartment construction site on 14.03.2020 pertaining to the subject '**Design of RC elements**'. Students gained knowledge on Reinforcement practices of Beam and columns.

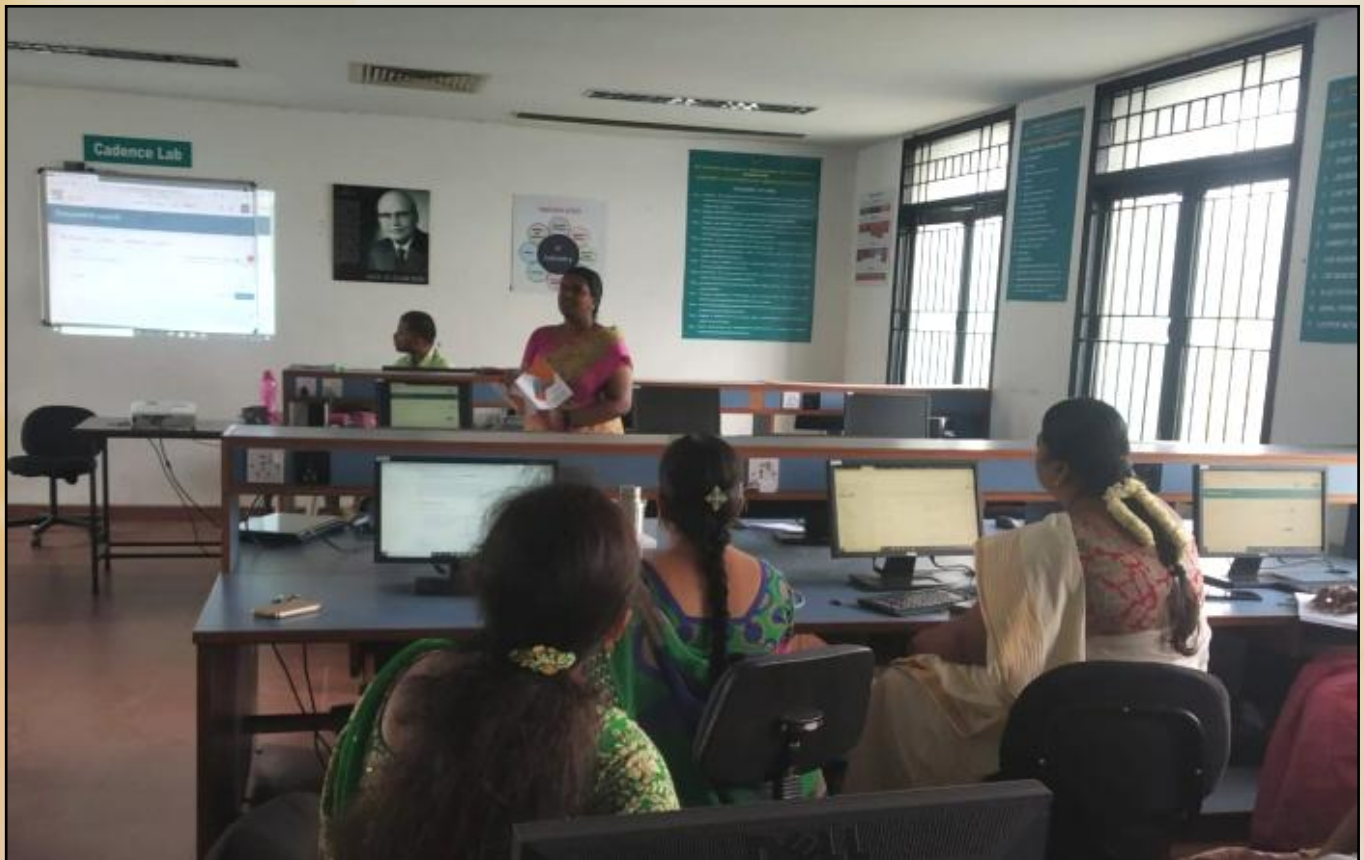


# CIVIL - OUTSIDE CLASSROOM LEARNING





## ECE - SENSITIZATION SESSION ON SCOPUS SEARCH



A Session on Scopus Search was handled by **Ms. Jayanthisree**, Assistant Professor, ECE for the faculty members of the Department.

## WORD OF THE DAY - AMBIDEXTROUS

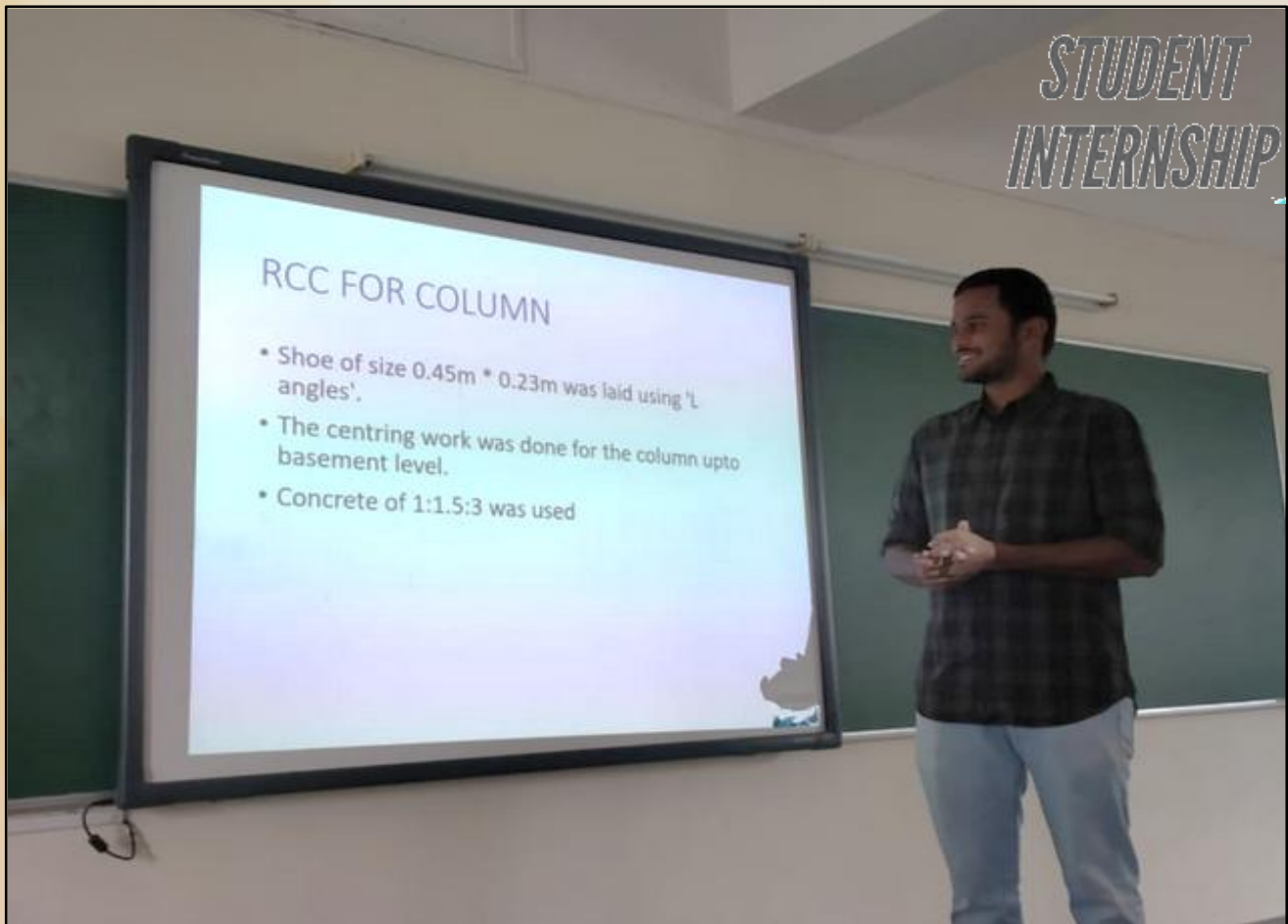


**MEANING:** Able to use the right and left hands equally well.

### AMBIDEXTROUS IN A SENTENCE:

- He could play the trumpet with either his left or right hand because he was **ambidextrous**.
- It is commonly estimated that about 10 percent of the human population is left-handed or **ambidextrous**.
- He scored high on intelligence tests, is **ambidextrous** and is known as a hard worker.
- I'm trying to become **ambidextrous**, but it isn't really working.
- Having broken her right hand, she could still write as she was **ambidextrous**.

## CIVIL – INTERNSHIP MODEL REVIEW



Internship Model Review was organised for the **Final** year **Civil Engineering** students on the information gained at site related to Planning, Structural design and execution of project. The Panel members **Mr. A. Jesudass**, **Mr. Prabhath Ranjan Kumar** and **Mr. S.C. Boobalan**, Assistant Professors, Department of Civil Engineering reviewed their presentations and gave suggestions to execute the project successfully.



# CIVIL – INTERNSHIP MODEL REVIEW GLIMPSES



## EEE - FINAL YEAR TUTOR MEETING

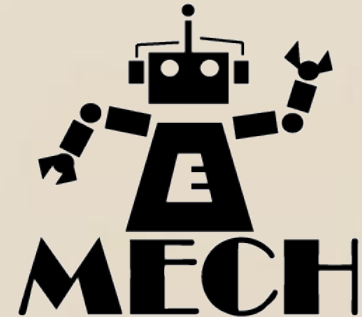


**Dr.K.C.Ramya, Head of the Department, EEE** convened a meeting with the Final year tutors and year coordinators regarding the status of Project completion and preparedness for lab exams.



## R&D - FACULTY PATENT PUBLICATION: MECH

(12) PATENT APPLICATION PUBLICATION	(21) Application No. 202041010325 A
(19) INDIA	
(22) Date of filing of Application :11/03/2020	(43) Publication Date : 13/03/2020
(54) Title of the invention : IMPROVIZED SWING CHECK VALVE APPARATUS THEREOF	
(51) International classification (31) Priority Document No (32) Priority Date (33) Name of priority country (86) International Application No (87) International Publication No (61) Patent of Addition to Application Number (52) Divisional to Application Number (53) Filing Date	(71) Name of Applicant : 1)R.Soundararajan Address of Applicant Professor Department of Mechanical Engg. Sri Krishna College of Engineering and Technology, Coimbatore, Tamil Nadu India 2)N.S.Sivakumar 3)K.Sathishkumar 4)N.Jayasuriya 5)R.G.Girish Vishnu 6)B.Guruprassad 7)S.Karthik 8)A.Sathishkumar
(51) International classification : F16K0015030000,F16K0015020000,G06F0009930000,F02D0041000000,E21B0034080000	(72) Name of Inventor : 1)R.Soundararajan 2)N.S.Sivakumar 3)K.Sathishkumar 4)N.Jayasuriya 5)R.G.Girish Vishnu 6)B.Guruprassad 7)S.Karthik 8)A.Sathishkumar
(57) Abstract : The present invention relates to an improvized swing check valve. Particularly, the present invention relates to a variable orifice which is used to change the flow parameters and produce turbulence in the pipeline to enable self cleaning and to compensate the wear losses during clapper chattering of the SCV casing. Also the variable orifice eliminates the fluctuation in the flow cause by the pump. The variable orifice is controlled by a sensor control apparatus to establish automatic functioning of swing check valve to measure the amount of wear loss/deteris in SCV casing due to this compensate the head loss of the pipe line. No. of Pages : 16 No. of Claims : 5	
The Patent Office Journal No. 11/2020 Dated 13/03/2020 13829	



Team of faculty from Mechanical Engineering Dr.R.Soundararajan, Mr.S.Karthik and Mr.A.Sathishkumar along with the following student team have published a patent titled ‘Improvized Swing Check Valve Apparatus thereof’ in the IPR Journal with the Application Number: 202041010325.

### STUDENT TEAM MEMBERS:

- K.Sathishkumar (II-M.E-Engineering Design)
- N.Jayasuriya (IV MECH)
- R.G.Girish Vishnu (IV MECH)
- B.Guruprassad (IV MECH)

## R&D - FACULTY JOURNAL PUBLICATION: CSE

Author's personal copy

Journal of Ambient Intelligence and Humanized Computing  
https://doi.org/10.1007/s12652-020-01791-9

ORIGINAL RESEARCH



### Sentiment analysis of student feedback using multi-head attention fusion model of word and context embedding for LSTM

K. Sangeetha<sup>1</sup> · D. Prabha<sup>2</sup>

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#### Abstract

Classroom teaching becomes viable and efficient based on increase in participation of the student. This can be made possible by taking need-based measure by finding the emotions of the students. Many researchers worked on emotion identification of students. Now-a-days sentiment analysis using deep learning models have gained good performance. Especially ensemble Long Short-Term Memory (LSTM) with attention layers gives more attention to the influence word on the emotion. In the proposed method, input sequences of sentences are processed parallel across multi-head attention layer with fine grained embeddings (Glove and Cose) and tested with different dropout rates to increase the accuracy. Later in this paper, the information from both deep multi-layers is fused and fed as input to the LSTM layer. In this paper, we conclude that the fusion of multiple layers accompanied with LSTM improves the result over a common *Natural Language Processing* method.

**Keywords** LSTM · Deep learning · Glove · Cose · Multi-head attention

#### 1 Introduction

The main purpose of teaching practice is to improve student learning and it has to be effective as it promotes knowledge in to students. Agarwal et al. (2011) considered that effective teaching, points have four important aspects. Especially in teachers of higher education, settings are outcomes, clarity, engagement, and enthusiasm.

Poulos et al. (2008) stated that effectiveness of teaching is always depends on teachers pedagogical ability and subject knowledge. In this paper, we studied with the aim of how feedback of students becomes the effectiveness part of teaching learning process. Baradwaj et al. (2011) stated feedback helps the teachers to formulate better decisions on how to improve the quality of teaching.

Student feedbacks are always deep and wide. They also give a comprehensive view on how their teachers encourage

and educate. The student feedback gives the teacher the opportunity to feel and understand the importance in teaching. They also get the chance to learn about their students from the feedback settings. Also students get benefits from the system.

Agarwal et al. (2011) proposed various tools to analyze and evaluate the opinion of students through feedback. Cummins et al. (2010) stated sentiment analysis is one of the famous and emerging technology in the field of NLP. Sentiment analysis (SA) evaluates the students' opinion automatically by classifying them in to positive, negative and neutral class said by Vohra et al. (2013).

There are several methodologies and standard tool has been developed in the evaluation of student's feedback using machine learning techniques affirmed by Agarwal et al. (2011). There are some challenges in these techniques, they are (1) if the dimension of the word increases then the traditional methods failed to find the relationship between the words, (2) The efficiency and accuracy in results depends purely based on manual feature selection, (3) previous research concentrates all the words and produces the target that is a time consuming process, (4) Singlehanded mechanism is inaccurate in sentimental analysis task. In order to face the problems raised by traditional models, a proposed model depends on popular deep learning methods like embedding using Glove and Cose, attention mechanism

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Published online: 14 March 2020



Sentiment analysis of student feedback using multi-head attention fusion model of word and context embedding for LSTM

K. Sangeetha & D. Prabha

Journal of Ambient Intelligence and Humanized Computing  
ISSN 1868-5137

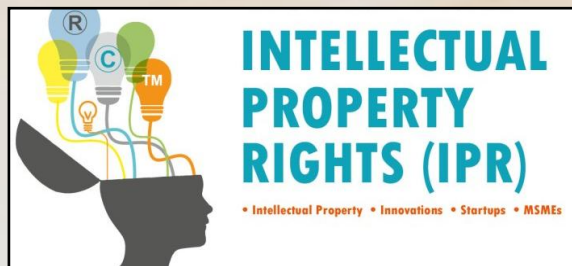
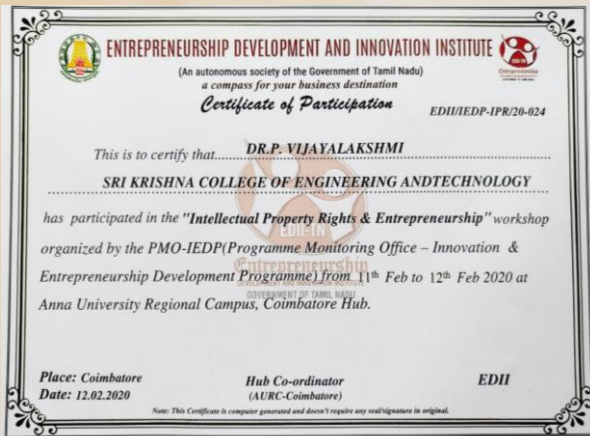
J Ambient Intell Human Comput  
DOI 10.1007/s12652-020-01791-9



Dr.D.Prabha, Assistant Professor, Department of Computer Science and Engineering has published a paper titled ‘Sentimental analysis of student feedback using multi-head attention fusion model of word and context embedding for LSTM’ in the Journal of Ambient Intelligence and Humanized Computing, Springer, ISSN 1868-5137. It is SCI, WOS and Scopus Indexed with an Impact factor of 1.91.



## SOM - FACULTY TRAINING



**Dr. P.Vijayalakshmi**, Associate Professor, School of Management has successfully completed the training on **'Intellectual Property Rights & Entrepreneurship'** organized by the EDII TN - PMO-IEDP (Programme Monitoring Office – Innovation & Entrepreneurship Development Programme from 11<sup>th</sup> Feb to 12<sup>th</sup> Feb 2020 at Anna University Regional Campus, Coimbatore Hub.

## R&D - FACULTY PATENT PUBLICATION: ECE

Application Details	
APPLICATION NUMBER	202041009990
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	08/03/2020
APPLICANT NAME	1 . Mr.J.R.Dinesh Kumar 2 . Dr.Venkatesalu Ramasamy Balaji 3 . Mr.S.P.Karthi 4 . Dr. B. Maruthi Shankar 5 . Mr. C. Visvesvaran 6 . Ms. K. Priyadharsini 7 . Ms. D.V. Soundari 8 . Mr. R. Sarath Kumar 9 . Dr.S.A.Sivakumar
TITLE OF INVENTION	A NOVEL SYSTEM DESIGN FOR INTRAVENOUS INFUSION SYSTEM MONITORING FOR BETTERMENT OF HEALTH MONITORING SYSTEM USING ML-AI
FIELD OF INVENTION	BIO-MEDICAL ENGINEERING
E-MAIL (As Per Record)	dineshkumarjr@skcet.ac.in
ADDITIONAL-EMAIL (As Per Record)	dineshkumarjr@skcet.ac.in
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	13/03/2020
Application Status	
APPLICATION STATUS	Application Published



The Patent titled ‘A novel system design for intravenous infusion system monitoring for betterment of health monitoring system using ML-A’ filed by a team of ECE faculty- Mr J.R Dinesh Kumar, Dr V.R. Balaji, Mr S.P Karthi, Dr. B.Maruthi Shankar, Mr C Visvesvaran, Ms K Priyadharsini, Ms D V Soundari and Mr R Sarath Kumar is published in IPR Journal with the Application Number: 202041009990.

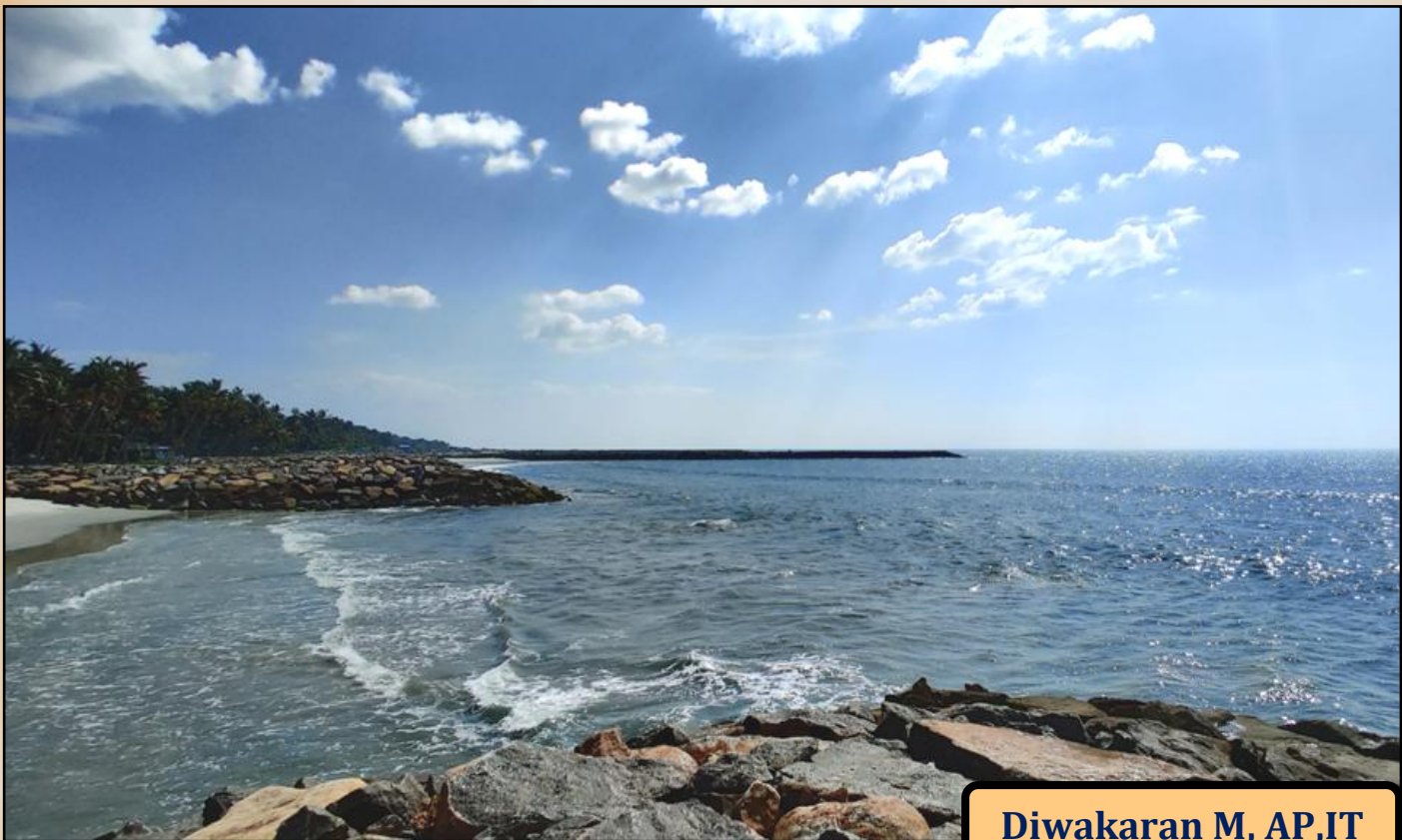


## MECH - FACULTY PROGRESSION



**Dr.K.P.Yuvaraj,** Assistant Professor, Department of Mechanical Engineering has successfully completed the module **‘10 reasons to get and use an ORCID iD’** from **Researcher Academy, ELSEVIER.**

## CAMCURVES



**Diwakaran M, AP,IT**

## CSBS - KNOWLEDGE SHARING: SNAP TALK



As a part of class room activity, a knowledge sharing- snap talk session was facilitated by **Mrs.G.Ignisha Rajathi**, Assistant Professor, Department of CSBS. Student teams participated with great interest and presented their topics to the peer group held on 14.03.2020.

Title: **Logical Storage and its connectivity**

Team Members: Hema Dharshini P and Nithish S

Title: **World Wide Web Storage**

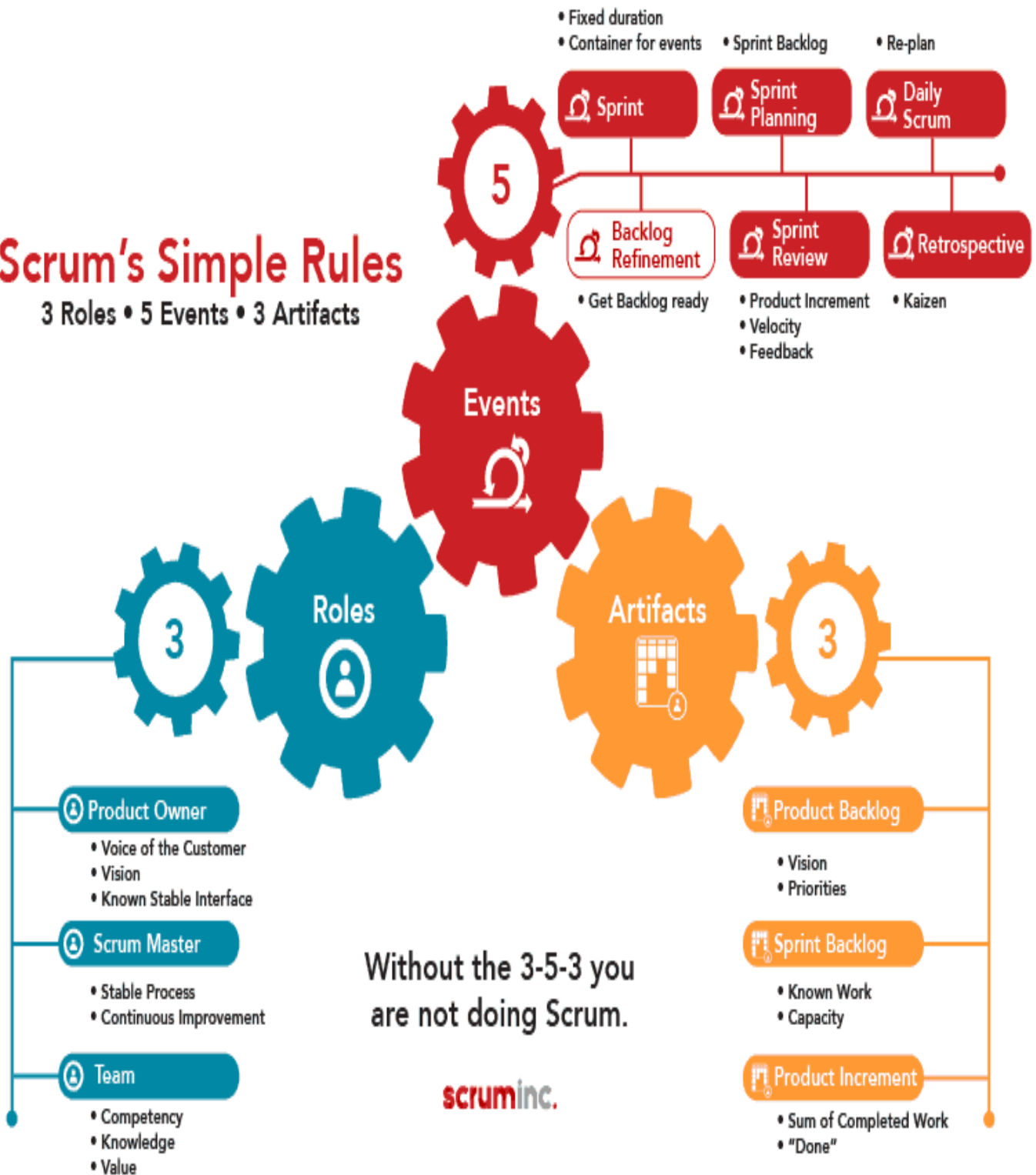
Team Members: Yogeshwaran R and Dharika P



# TECHNOGRAPHICS - SCRUM PROCESS

## Scrum's Simple Rules

3 Roles • 5 Events • 3 Artifacts



## R&D - FACULTY JOURNAL PUBLICATION: EEE

International Journal of Engineering and Advanced Technology (IJEAT)  
ISSN: 2249 – 8958, Volume-9 Issue-3, February, 2020

### Modified U-Cell Inverter using Advanced Process Controller for Photovoltaic Applications

Sumathi R, Sankari V

**Abstract:** This paper proposes a single phase modified seven level U-Cell inverter configurations in which the advanced process controller has been implemented. By using the boost operation the output of the inverter will produce higher output voltage when compared to the maximum DC source value used. To obtain maximum power the designed inverter is implemented with the photovoltaic system where the power is produced from two different PV panels which is connected to DC link by using DC-DC converters. The semiconductor switches and DC links are used to generate the inverter AC output voltages with seven levels. Two PV panels with different voltages are used in which two panels voltages are combined and their powers are injected to the grid. To validate the dynamic performance of the proposed U-Cell inverter the advanced process controller is used in the inverter connected to the grid. The controller is designed and processed to maintain the capacitor voltage to obtain the desired AC output with desired magnitude. The dynamic performance during changes in the supply current and DC voltage of capacitor for the process controller has been obtained.

**Keywords:** Advanced process controller, modified U-Cell inverter, PV panels, U-Cell inverter.

#### I. INTRODUCTION

Power electronics inverters are exceptionally deprived at interface to convey capacity to the grid and loads. Diminishing the natural contamination by expanding the productivity and diminishing power losses. Since the quantity of purchasers has been expanded and the quantity of high force ventures is expanded force network has surprisingly confronted higher vitality request [1]. Because of the improving innovation of semiconductor gadgets the Power electronic equipment is supplanting massive transformers. Much research has been centered essentially around staggered inverter advancement considering both the topology and control procedure angles. The primary consideration is paid to the quantity of segments utilized in such sorts of inverters. Power inverters are generally utilized in sustainable power source transformation frameworks to convey green capacity to the clients. Monetary expenses of intensity switches make them gainful to produce and permit them to contend in the market [2]. These days, utilizing more switches in the inverter structure doesn't build the cost fundamentally, hence, two-level ordinary converters with high power losses and

harmonics substance are being supplanted by low exchanging recurrence staggered inverters quickly.

Regular inverters have a few downsides like non sinusoidal yield voltage wealthy in Total harmonic distortion (THD), high switching losses and thermal stress at high exchanging recurrence with significant level of basic mode commutation [3]-[6]. Staggered inverters establish a class of gadgets which present intriguing highlights that are normally adjusted to sun powered vitality change plans and in this way comprise a fascinating answer for the sun oriented vitality innovation. Customary staggered inverters present produce numerous disadvantages they are exorbitant and difficult to actualize when the quantity of voltage levels increments. So as to beat the effect of such issues, new staggered inverters topologies have been proposed. On the off chance that the quantity of parts utilized is less, the power losses will be less and the cost will likewise be less [7]. The seven-level MUC inverter has been created and proposed for applications with significant focal points like actualizing low number of segments moreover it additionally produces more elevated levels of AC voltages at the yield.

The created structure has lower number switches than the seven-level CHB inverter which likewise shows a similar exhibition of the inverter. Right now of the inverter, two diverse DC sources which is gotten by the two distinctive PV boards are utilized to produce the seven degrees of AC voltages with low sounds and appropriate voltage sharing between the levels. The yield AC voltage acquired would have higher greatest incentive as entirety of the two DC sources amplitudes, which can be gotten with the assistance of a boost operation and solution for the low voltage utilization of the referenced U-Cell inverter. In spite of the fact that best in class process controller was created are straightforward and instinctive. Contrasting propelled process controller with other old style controllers, countless figuring ought to be executed at each time step before imparting the suitable ideal sign to the gadget. Process controller comprises of figuring the firmure conduct of the controlled factors, contrasting them with their references, ascertaining cost work which ought to be limited so as to pick the ideal state.

Then again, it includes some intriguing qualities, for example, quick powerful reaction, precise following and no increase to time and no compelling reason to utilize an outside sort of modulators. Right now, process controller is produced for the MUC inverter for grid connected application.

Revised Manuscript Received on February 05, 2020.

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Website: www.ijeat.org

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Blue Eyes Intelligence Engineering and Sciences Publication



Dr.Sumathi R, Assistant Professor, EEE along with V.Shankari, Final year student of EEE has published a paper entitled 'Modified U cell Inverter using Advanced Process Controller for photovoltaic application' in the International Journal of Engineering and Advanced Technology-IJEAT which is Scopus Indexed with the ISSN : 2249 – 8958, Volume-9 Issue-3, February, 2020.



## R&D - FACULTY PATENT PUBLICATION: ECE

		<small>Controller General of Patents, Designs and Trademarks Department of Industrial Policy and Promotion Ministry of Commerce and Industry</small>
<b>Application Details</b>		
APPLICATION NUMBER	202041010011	
APPLICATION TYPE	ORDINARY APPLICATION	
DATE OF FILING	09/03/2020	
APPLICANT NAME	1 . Dr. A. Albert Raj 2 . Mr.S.Satheesh Kumar 3 . Dr.S.Sophia 4 . Dr.B.Maruthi Shankar 5 . Mr.A.Beno 6 . Mr.T.Vignesh 7 . Mr.S.Jeeva 8 . Mr.I.J. John Bharathkumar 9 . Mr.L.K . Kiran 10 . Mr.T.Kavin	
TITLE OF INVENTION	EFFECTIVE AND EFFICIENT HONEY HARVEST ALERT SYSTEM FOR BEE FARMS.	
FIELD OF INVENTION	PHYSICS	
E-MAIL (As Per Record)	albert@skcet.ac.in	
ADDITIONAL-EMAIL (As Per Record)	albert@skcet.ac.in	
E-MAIL (UPDATED Online)		
PRIORITY DATE		
REQUEST FOR EXAMINATION DATE	--	
PUBLICATION DATE (U/S 11A)	13/03/2020	
<b>Application Status</b>		
APPLICATION STATUS	<b>Application Published</b>	



The Patent titled ‘Effective and Efficient Honey Harvest Alert System for Bee Farms’ filed by a team of ECE faculty Dr. A. Albert Raj , Mr.S.Satheesh Kumar, Dr.S.Sophia, Dr.B.Maruthi Shankar and Mr.T.Vignesh(MCT) along with Second year students of ECE ‘B’ - S.Jeeva, I.J.John Bharathkumar, L.K . Kiran and T.Kavin is published in IPR Journal with the Application Number: 202041010011.

**RE-CELEBRATING STUDENT ACHIEVEMENTS: PROJECT DESIGN CONTEST**



Project of **Vishali S, III CSE KPIT SPARKLE 2020** has been granted a funding of **Rs.75 Lakhs** towards product development at the leading Tech Giant's Incubation Cell on 13/2/2020.



Team of students from the department of Mechanical Engineering has won **First prize** at **INNOVAY'19** - An Innovative Project Presentation contest organized by the leading **MNC CAMERON**Inc (SCHLUMBERGER Valves) on 10.10.2019



**RE-CELEBRATING STUDENT ACHIEVEMENTS: PROJECT DESIGN CONTEST**



The team **Electron Boom** - Dharmalingam, Jayaprakash, Poovarasam, and Poovendan of III EEE along with Faculty mentors **Mr.S.Boobalan** and **Mr.S.Karthikeyan** won the **Commendable Appreciation Award** with a cash Prize of Rs.10,000/- at **Mitsubishi Electric Cup 2020** on 17.02.2020.



District-level Competition of the World Robotic Champonship event "**Fastest Line Follower Robot**" event was organised by SKCET on 6.12.2019

**RE-CELEBRATING STUDENT ACHIEVEMENTS: PROJECT DESIGN CONTEST**



**RECAP**

Milestone Celebrations



**Students participation in Codissia National Science and Technology Fair (NSTF) 2019 on 30.8.2019**

Second year student team from the Department of CSBS and CSE has secured the **Award of Excellence** in the Presentation and Demo on 'Cyber security trends and live hacking use cases' at TVS Motor Company Limited, Hosur on 25.02.2020 and 26.02.2020.





## SKCET IN MEDIA: USVA AWARDS 2020

Utkrisht Sansthan Vishwakarma Award to Sri Krishna College of Engineering and Technology



SKCET, received the Third Prize in National level and First Prize in Tamil Nadu region of AICTE-Utkrisht Sansthan Vishwakarma Award (USVA). Chairperson and Managing Trustee of Sri Krishna Institutions S.Malarvizhi and Dr.J.Janet, Principal of the college received this award from Ramesh Pokhriyal 'Nishank', Minister of Human Resource Department, Government of India. Prof.Anil D.Sahasrabudhe, Chairman, AICTE, Ramanan Ramanathan, Mission Director, ATAL and NITI AAYOG, Dr. Pratapsingh K. Desai President, ISTE and Prof.Rajiv Kumar, Member Secretary, AICTE were the key delegates present at the ceremony. SKCET has been bestowed this award-USVA for the implementation of the project on 'How to enhance the income of Villages' by adopting two villages.

**THE HINDU**  
INDIA'S NATIONAL NEWSPAPER SINCE 1878

16.03.2020