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**VIDYAVARDHINI'S
NATIONAL CONFERENCE ON
TECHNICAL ADVANCEMENTS FOR
SOCIAL UPLIFTMENT
VNC - 2020 TASU**

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Signature of Participant

HEAD
Dept. of Mechanical Engg.
Vidyavardhini's College of
Engineering & Technology
New Bar Road - 401202.

Account Name: Vidyavardhini's College of

Engineering and Technology

Bank Name: Union Bank of India

Branch: Vidyavardhini College Branch, Vasai Rd (W)

Account Number: 320602011001031

IFSC: UBIN0562556

MICR: 400026153

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**VIDYAVARDHINI'S
NATIONAL CONFERENCE ON
TECHNICAL ADVANCEMENTS FOR
SOCIAL UPLIFTMENT**

**VNC - 2020 TASU
4TH APRIL, 2020**

**Organized by:**

**Vidyavardhini's College of
Engineering & Technology**
K.T. Marg, Vasai (W) - 401202

Affiliated to University of Mumbai

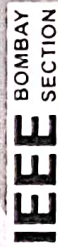
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In Association With:

**BJIT - BVICAM's International Journal of Information
Technology, BJIT is now indexed at DBLP, INSPEC
& UGC - CARE List. ISSN: 2511-2104 (Print Version),
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**IJERT - International Journal of Engineering
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Conference Website: www.vcet.edu.in/vnc2020/**Technically Sponsored By:**

About us:

Vidyavardhini means a Body committed to enhancement of Knowledge. Vidyavardhini was established as a registered society in 1970 by late Padmashri H. G. alias Bhausaheb Vartak for the noble cause of education in rural areas.

Vidyavardhini's College of Engineering and Technology, Vasai is located on the sprawling campus of Vidyavardhini, spread over an area of 12.27 acres. It is a short, two minutes walk from Vasai Road (W) Railway Station. The college is also accessible by road from Mumbai.

Vidyavardhini Society received approval from AICTE to start the new college of Engineering & Technology with effect from July, 1994. The college is affiliated to the University of Mumbai for the four year degree program leading to the degree of Bachelor of Engineering in six branches.

Objective of VNC 2020 TASU

Technology has always been potential tool for simplifying the way we do things. Present time demands directing the technological advancements towards addressing societal challenges such as improving health care, education environment, sanitation, agriculture, smart city, etc., VNC 2020 TASU aims to provide an opportunity to researchers, academicians, Industrialist and students to interact and share their ideologies and contributions made for social upliftment with the aid of technological advancements.

Call for paper

We welcome submission in following area

1. Sustainable Computing
 2. High Performance Computing
 3. High Speed Networking and Information Security
 4. Software Engineering and Emerging Technologies
 5. Mathematical, Experimental, Computational and AI, IoT Techniques in Mechanical Engg.
 6. Industrial Engg., ERP, MRP, SCM
 7. Renewable Energy Technologies
 8. Pollution control and Waste Management
 9. Advances in Structural engineering
 10. Present geotechnical practices
 11. Present practices in construction management
 12. Recent developments in Instrumentation, control and automation
 13. Embedded Systems, IoT and VLSI Design
 14. Optical and Wireless Communication for NGN
 15. Antenna and Microwave Devices
- Any other relevant topics

Publication Information

Proceedings of VNC - 2020 TASU will be published with ISBN number

1. Selected Papers will be published in International Journal of Information Technology, Published by Springer Nature, ISSN: 2511-2104 (Print Version), ISSN: 2511-2112 (Electronic Version)

2. All papers will be published in IJERT, ISSN: 2278-0181

Important Dates:

- Submission of full length paper
15th Feb 2020
- Paper Acceptance Notification
22nd Feb 2020
- Submission of Final Version of Paper
29th Feb 2020
- Registration Deadline
5th March 2020
- PPT Submission
20th March 2020
- Conference
4th April 2020

Registration Fee Details:

Category of Delegates / Authors	Indian Authors & Delegates (in INR)
Full Time Students (UG)	1,500.00
Teachers/ Research Scholars/ PG students	2,500.00
Industry	3,500.00

Paper Submission:

Paper submission should be made strictly via Easy Chair the submission link for VNC 2020 "TASU".

www.easychair.org/conferences/?conf=vnc2020

Download paper template from:

https://www.vcet.edu.in/vnc2020/Template_For_Full_Paper%20VNC%202020.doc

Contact Us:

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ROAD SAFETY SYSTEM

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Abstract.— As we are slowly reaching the age of electric vehicles, there has also been a lot of development in the field of road safety and ways to reduce accidents and crashes due to driver negligence. Driving without a valid license is one of the major causes of road accidents. Along with this we also face a major issue behind the mass use of electric vehicles which is the battery charging time and lack of charging stations. So here we propose a regenerative braking system with power monitor. This system allows a vehicle to generate energy each time brakes are applied as well as track the amount of power generated. As soon as brakes are applied, the friction lining touches the drum from inside and moves the motors connected to lining in same direction, thus generating electricity using motors as dynamo. Also we will use a circuitry to track the battery voltage generated with each press along with the count of brake press. Thus this system allows for charging security system battery each time brakes are applied. For the security system, our aim is to develop a system that verifies the details of the driver, and classifies him/her to be safe to drive the vehicle. The security system will limit the vehicles operation on the basis of 3 parameters. The basis of Acceptance or rejection will mainly be on 3 main factors namely, expiry date, vehicle ownership and category of the vehicle for which the driving license is issued. Verification of smart driving license card would enhance the road safety and vehicle security. The security system will use a microcontroller which is interfaced with RAM and ROM of the sensor. Along with this aim we would also like to advance the safety of the vehicles, in terms of security, its ownership and theft protection. The system will increase road safety and reduce vehicle theft. The Setup could be made more advanced and feature rich with the help of a pinhole camera and GPS tracking device. The image captured

by the camera and GPS data may be send to owner's mobile phone and the data can help identify the thief and retrace. The system can also be integrated with other safety and crash prediction systems.

PROBLEM DEFINITION

We seem to be facing a major issue behind the mass use of electric vehicles is the battery charging time and lack of charging stations. So here we propose a regenerative braking system. This system allows a vehicle to generate energy each time brakes are applied. The stronger the brakes, the more power is generated. We use friction lining arrangement in a brake drum. As a drum rotates the friction lining does not touch the drum. As soon as brakes are applied, the friction lining touches the drum from inside and moves the motors connected to lining in same direction, thus generating electricity using motors as dynamo. In general, RBS is a system can recuperate mechanical energy to electrical energy during braking action. This system allows the vehicle kinetic energy to be converted into electrical energy and can be stored in the battery. This saved energy will be used again to move the vehicle. Thus this system allows for charging a battery each time brakes are applied, thus providing a regenerative braking system. It moves us another step ahead towards a pollution free transportation system. There has been a lot of development in the field of road safety and ways to reduce accidents and crashes due to driver negligence. Driving without a valid license is one of the major cause of road accidents. The system will limit the vehicle operation on the basis of 3 parameters. Verification of smart driving license card would enhance the road safety and vehicle security. The right equipment consists of various hardware and software systems to develop this system. The Licentronic system uses a microcontroller which is interfaced with RAM and ROM of the sensor.

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