

# Vivekanand Education Society's Institute Of Technology

(Affiliated to University of Mumbai, Approved by AICTE & Recognized by Govt. of Maharashtra)

Institute Name	Vivekanand Education Society's Institute Of Technology
India Ranking 2022 ID	IR-E-C-33895
Discipline	Engineering
Parameter	Patents Details 2020

# 1. Multiresolution based hybrid filters for despeckling digital images

Mrs. Shilpa Shailesh Joshi,Dr. Ramesh Kulkarni

# App.No.-201821042111A Date of published : 25/10/2019 Grant Date : 10/07/2020

**Abstract-** A multi-resolution based hybrid filters for despeckling digital images comprises image de-noising performed by at least one of the pairs of electronic filters on a processable image in universal standard format. A resolution enhancement is performed on the output images after intensity correction by at least single-image enhancement method or by generating a high resolution image from a plurality of low-resolution images by estimating unknown pixels from neighboring known pixel values. A segmentation is further carried on the high resolution output images by combining Otsu method and K-means algorithm followed by selection of Region of interest in the image to detect the irregularity in the image and classify the irregularity.

# 2. Device and method for generating pulses for calibration of high resolution spectroscopy instruments

Mrs. Asma Parveen I.Siddavatam, Dr. J. M. Nair, Dr. P. P. Vaidya

# Application No.201921043615 A

#### Date of published : 13/11/2020

**Abstract**- A device and method for generating pulses for calibration of high-resolution spectroscopy instruments such as a pulse nuclear spectroscopy instrument is disclosed. The device 100 includes a plurality of resistor networks having first resistor network 210, a plurality of adder, analog multiplexers, and amplifiers 230, and a plurality of programmable counters 220. The said first resistor network 210 receiving reference input voltage and connected to the first set of analog multiplexers, adder and amplifiers 230, output of programmable counter 220 being connected to first set of analog multiplexers 230, output of 230 connected to the second resistor network 240 and the same setup being repeated multiple times to achieve expected resolution. The present invention generates a waveform of uniform amplitude distribution with a time period which can be as small as a few milliseconds and as large as thousands of seconds. FIG. 2 For Publication

# **3.** Modified ISO/IEC 25010 Quality attribute formulation with respect to Internet of things

#### **Rohini Navnath Temkar**

#### Application No. 202011004108 A

#### Filing Date-30/01/2020 Date of published : 06/08/2021

**Abstract-** With the emerging technologies the smart devices and connectivity of the world has climbed up to a pinnacle. As a result, Internet of Things (IoT) applications arise to maximize connectivity with heterogeneous and enormous size of devices. The existing ISO 25010 model has not focused on the IoT application characteristics like a) intelligent hardware devices b) software-hardware collaboration c) networked, wireless and mobile connectivity d) remote monitoring for IoT devices e) Limited battery and memory. The current work introduces additional IoT application characteristics as compared to software applications and does the mapping of IoT application characteristics with ISO/IEC 25010 quality attributes. It also modifies and formulates ISO/IEC quality attributes with respect to IoT applications

4. Device for Common Mode Voltage Removal

Mrs. Nilima Warke, Dr. J.M.Nair , Dr. P. P. Vaidya

Application No. 201921042142 Date of published : 23/10/2020

**Abstract-** The present invention relates to electronic systems for reducing common mode voltage signals and more particularly to a system for common mode voltage removal having effective common mode rejection ratio (CMRR) without affecting differential voltage.

# 5. A method and system for of rating and reward distribution on decentralized blockchain platform

Dr. Nupur Giri

Application No.201921034418

### Date of published: 05/03/2021

Abstract-A method and system for rating and reward distribution on a decentralized blockchain platform wherein the recruiters may hire professionals with a reliable rating, as measured by a token (the reputation score). It serves as an evaluation of the users on the respective skill sets. Working professionals or students can ensure that their skills are evaluated by an unbiased majority, called evaluators. Evaluators whose responses get accepted are able to earn rewards with monetary value, such as, cryptocurrency, electronic wallet-based tokens, or any form of money widely accepted. The concept of a proof-of-skill, where a person becomes an evaluator when his reputation score is more than the average score of all the users in that particular skill. The evaluator receives rewards proportional to his score and the deviation of his score (for the claimant) from the mean of the scores as provided by other evaluators.

# 6. A System And Method For Blockchain Based Energy Trading

#### Dr. Nupur Giri

Application No.201921031929

# Date of published: 112/02/2021

**Abstract**-A system and method for blockchain based energy trading, comprising the energy generating devices which generates and trades that energy with other energy generating devices. These devices can earn digital currency by validating the submitted transactions. Validation is an activity wherein a device can verify the authenticity of the transaction by investing its own compute time and resources. The digital currency indicates a device's stake in the ecosystem. The system and method for blockchain based energy trading comprises Block-Trade and Block-Gen modules, which allow the system to perform buying, selling and lending functionalities. The buying and selling of energy may be executed by a smart contract deployed on the blockchain.

The system makes use of the supply-demand equilibrium model to dynamically calculate the digital currency equivalence of energy. The energy generating devices may also lend digital currency. The terms of the loan will be set by a smart contract.

# 7. System For Aiding Visually Impaired

### Dr. Sharmila Siddhartha Sengupta

### Application No.202021016810 Date of published: 22/10/2021

**Abstract**-The present disclosure relates to a system to monitor and implement COVID appropriate protocol, particularly to monitor appropriate face coverage and social distance. More particularly, the present invention monitors and implements COVID appropriate protocol using artificial intelligence.

# 8. System to Monitor and Implement COVID Appropriate protocol

#### Dr. Gresha Bhatia, Mrs Abha Tewari

### Application No.202121021574 Date of published: 12/11/2021

**Abstract**-The present disclosure relates to a system to monitor and implement COVID appropriate protocol, particularly to monitor appropriate face coverage and social distance. More particularly, the present invention monitors and implements COVID appropriate protocol using artificial intelligence.

# 9. A novel wearable for detecting drowsiness among operator of heavy machinery/vehicles

#### Sangeetha Prasanna Ram

# Application No.202121008470 Date of filing: 3/1/2021

**Abstract**: The present invention involves the design of a wearable that can be employed to detect drowsiness among operators of heavy machinery.