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(54) Title of the invention : HUMAN VITAL SIGNS PROCESSING USING MACHINE LEARNING

(51) International classification :A61B0005000000, A61B0005047600, A61B0005040000, A61B0005040800, A61B0005048800

(86) International Application No :NA
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(57) Abstract :

Biomedical signals are mainly acquired in nonlinear and time varying environments. Machine Learning can also be applied effectively for the processing and classification of bioelectric signals, like an Electrocardiogram (ECG), Electroencephalogram (EEG), Electromyogram (EMG), etc. The information about our body such as heart rate, blood pressure, oxygen saturation levels, blood glucose, nerve conduction, brain activity, etc. can be regularly measured by different medical devices to provide us insight into the state of our health we can process the bio-signals in python with Machine Learning toolbox. With the help of bio-signals processing, clinicians can get more in-depth, real-time data about patient health without needing to use invasive measures. Moreover this system is more sophisticated and time saving where we can predict the human disease in very accurate without any errors.

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(54) Title of the invention : BRAKE LIGHT DETECTION USING IMAGE PROCESSING ALGORITHM

(51) International classification :G06K0009000000, G06K0009620000, G06K0009320000, G06T0007730000, B60Q0001140000

(86) International Application No :NA
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(57) Abstract :

ANNEXURE 3 An important and challenging aspect of developing an intelligent transportation system is the identification of nighttime vehicles. Most accidents occur at night owing to the absence of night lighting conditions. Vehicle detection has become a vital subject for research to ensure safety and avoid accidents. New vision-based on-road nighttime vehicle detection and tracking system are suggested in this survey paper using taillight and headlight features. Using computer vision and some image processing techniques, the proposed system can identify vehicles based on taillight and headlight features. For vehicle tracking, a centroid tracking algorithm has been used. Euclidean Distance method has been used for measuring the distances between two neighboring objects and tracks the nearest neighbor.

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

(54) Title of the invention : BIOMETRIC BASED VOTING SYSTEM USING IMAGE PROCESSING

(51) International classification :G06K0009000000, G06F0021320000, A61B0005117200, G07C0009370000, G07C0013020000

(86) International Application No :NA
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(57) Abstract :
 Fingerprint identification is one of the most well-known and publicized biometrics. Because of their uniqueness and consistency overtime, fingerprints have been used for identification for over a century, more recently be coming automated a biometric due to advancement sin computing capabilities. Finger print and offline data set are important identities of the candidate in voting process. It is used to fulfill the user requirements. It has simple architecture and gives instant response. It decreases the polling time. Transportation is very easy from one station to other station, and usage of manual power has also reduced. It gives accurate result at the time of counting without committing mistakes.

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

(54) Title of the invention : AUTONOMOUS HAULAGE AUTOMOTIVE SYSTEM FOR COAL MINE SAFETY

(51) International classification :E21F0017180000, H04W0084180000, G08B0021140000, G01N0033000000, E21F0011000000

(86) International Application No :NA
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(57) Abstract :

ANNEXURE 3 Today, safety of miners is a major challenge. Miner's health and life is vulnerable to several critical issues, which includes not only the working environment, but also the after effect of it. Coal mine safety monitoring system based on wireless sensor network can timely and accurately reflect dynamic situation of staff in the underground regions to ground computer system and mobile unit. Persons who are working in hazardous areas safety precautions are must especially the persons who are in underground working areas like coal mines industries it is necessary to watch the underground environment parameters like temperature, toxic .humidity gas etc because underground parameters are changes any times. The air pollution from coal mines is mainly due to emissions of particulate matter and gases include Sulfur dioxide (SO₂), nitrogen dioxide (NO₂), carbon monoxide (CO) etc. To monitor the concentration level of harmful gases, semiconductor gas sensors are used. The system uses Bluetooth technology for transmission of data. There is alert switch at receiver and transmitter side for emergency purpose.

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

(54) Title of the invention : SMART ENTRANCE SYSTEM WITH MASK DISTRIBUTION

(51) International classification :G06Q0050260000, A61B0005020500, G08B0021240000, A61B0005010000, G01K0013000000

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(57) Abstract :
 In this Covid19 situation Government gave a lot of guidelines and awareness to the people. Apart from the government's side every people has a responsibility to protect his own health. To protect him, according to the government rules every person wears a mask on his face, wash their hands regularly, maintains social distances are essential. Corona infected people their Body Temperature will raise automatically which are a common symptom. In this project we implement a new device to monitoring the parameters of the people body temperature, heartbeat and also using image processing to detect whether a person wearing a face mask or not.

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

(54) Title of the invention : A BIO SOLAR CELL BASED SYSTEM FOR EFFICIENT HARVESTING OF SOLAR ENERGY

(51) International classification :H01L0031054000, F24S0023700000, F24S0020700000, C02F0001140000, B01D0053840000

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(57) Abstract :
 A bio solar cell-based system for efficient harvesting of solar energy is the proposed invention. The invention focuses on utilizing the natural process that use photosynthesis to convert sunlight into useable energy. The proposed invention will address the disadvantages that are inherent in the existing solar energy harvesting techniques.

No. of Pages : 11 No. of Claims : 4

(54) Title of the invention : AUTOMOTIVE SAFETY SYSTEM USING INTERNET OF THINGS

(51) International classification :G08B0025100000, G02B0001180000, E01D0019000000, B64D0025120000, E21F0011000000

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(57) Abstract :
 ANNEXURE3 Embedded platforms have been utilized considerably in recent times to reduce the time required for rescue after an accident. Road traffic accident is a major global health issue resulting huge loss of lives, properties and valuable time. It is considered as one of the reasons of highest rate of death nowadays. Accident creates catastrophic situation for victims, especially accident occurs in highways imposes great adverse impact on large numbers of victims. In this project we implement a new device which monitoring the parameters of a driver and vehicle and also monitors the health of the vehicle by using embedded technology owner can get the updates quickly.

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