Department of Computer Science and Engineering
(Artificial Intelligence & Machine Learning)

Patents Published

S.No	Application No.	Publication Date	Title, Applicants
1	202341075689	22-12-2023	Visual Gaze Tracking, **Dr. U. Mohan Srinivas**
2	202341075688	22-12-2023	Rapid Response for Women Safety, **Ms. P. Hema**
3	202341057262	01/12/2023	A system and method for integration of internet of things (IOT) with 5g networks, **Kancharakuntla Shirisha**
4	202341048164	01/09/2023	An improved real-time object detection capable of being adapted in real-time for use in traffic surveillance by utilizing R-CNN in place of CNN, **M. Jaganmohan Reddy**
5	202341006671	10/02/2023	**Steve - The Voice Assistant,** MREC**,** Kalidandi Rajesh, Shaik Yakusha, Katta Rajesh, Gudlanarva Maniteja, Thakur Manmohan Singh, Shaik Sana Fathima, Bonagiri Sanjana, Dr. Manyam Thaile, Dr. Krishna Kishore Datti, Dr. Jasti Lavanya

Patents Published Details

1. APPLICATION NUMBER: **202341075689**, DATE OF FILING: 06/11/2023
APPLICANT NAME: **1 . Dr. U MOHAN SRINIVAS**, 2 . Malla Reddy Engineering College, TITLE OF INVENTION: **VISUAL GAZE TRACKING**,
PUBLICATION DATE (U/S 11A): **22/12/2023**.
Inventors: Dr. U MOHAN SRINIVAS, CH.SOUJANYA, M. SAILU, KATRAGADDA SRI GOWTAMI, ANANTHANENI MOUNIKA, GAJJALA SHASHANK REDDY, CH.SRI HARSHA, VINUTHNA BODAPOTHULA, A. Shashidhar reddy, D. VADNALA SAGAR

2. APPLICATION NUMBER: **202341075688**, DATE OF FILING: 06/11/2023
APPLICANT NAME: **1 . Parre Hema**, 2 . Malla Reddy Engineering College
TITLE OF INVENTION: **RAPID RESPONSE FOR WOMEN SAFETY**
PUBLICATION DATE (U/S 11A): **22/12/2023**
Inventors: Parre Hema, Mohammed Bilal, Kuchana Shravya, Kodi Akshay, Dhondi Panduranga, Sambari Chaitanya, R Sravanthi, M Jaganmohan Reddy, B Srinath, Dr. Shaik Fairooz

3. APPLICATION NUMBER: **202341057262**, DATE OF FILING: 25/08/2023
APPLICANT NAME: 1 . Dr. Neelam Sanjeev Kumar, 2 . Dr. B Suganthi, 3 . Mr. Rayavarapu Bhavani Sankar, 4 . Dr. A.Syed Musthafa, **5 . Kancharakuntla Shirisha** 6 . Dr. R. Pitchai, 7 . Dr. C. R. Rene Robin
TITLE OF INVENTION: **A SYSTEM AND METHOD FOR INTEGRATION OF INTERNET OF THINGS (IOT) WITH 5G NETWORKS**
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4. APPLICATION NUMBER: **202341048164**, DATE OF FILING: 17/07/2023
APPLICANT NAME: 1 . Dr. T. Guhan, 2 . Dr. N. Revathy, 3 . Dr. A. Ganesan, **4 . M. Jaganmohan Reddy**, 5 . Dr.J.Mahil, 6 . Mrs. D. Jyothirmai
TITLE OF INVENTION: **AN IMPROVED REAL-TIME OBJECT DETECTION CAPABLE OF BEING ADAPTED IN REAL-TIME FOR USE IN TRAFFIC SURVEILLANCE BY UTILIZING R-CNN IN PLACE OF CNN**
PUBLICATION DATE (U/S 11A): **01/09/2023**

5. APPLICATION NUMBER: **202341006671**, DATE OF FILING: 02/02/2023
APPLICANT NAME: Malla Reddy Engineering College
TITLE OF INVENTION: Steve - **The Voice Assistant**
PUBLICATION DATE (U/S 11A): **10/02/2023**
Inventors: Kalidandi Rajesh, Shaik Yakusha, Katta Rajesh, Gudlanarva Maniteja, Thakur Manmohan Singh, Shaik Sana Fathima, Bonagiri Sanjana, Dr. Manyam Thaile, Dr. Krishna Kishore Datti, Dr. Jasti Lavanya

Patents Published Proof Details

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Application Details	
APPLICATION NUMBER	202341075689
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	06/11/2023
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Application Details	
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APPLICATION TYPE	ORDINARY APPLICATION
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Application Details	
APPLICATION NUMBER	202341057262
APPLICATION TYPE	ORDINARY APPLICATION
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Application Details	
APPLICATION NUMBER	202341048164
APPLICATION TYPE	ORDINARY APPLICATION
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TITLE OF INVENTION	Steve - The Voice Assistant
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(57) Abstract :
This invention presents an innovative assistive technology solution designed to enhance the accessibility and quality of life for physically challenged individuals. The "Eye Mouse for Physically Challenged Persons" is a sophisticated system that utilizes advanced eye-tracking technology to enable individuals with limited or no physical mobility to interact with and control electronic devices such as computers, tablets, and smartphones. The system incorporates a high-precision eye-tracking camera and specialized software that can accurately capture and interpret the user's eye movements and gestures. By using their eyes as input, physically challenged individuals can perform a wide range of tasks, including cursor control, text input, and navigation through software interfaces. Key features of this technology include real-time eye movement tracking, customizable user interfaces, and integrated voice recognition for enhanced usability. The system's software adapts to the specific needs and abilities of each user, making it a versatile solution for individuals with diverse physical challenges. The "Eye Mouse for Physically Challenged Persons" aims to empower individuals with physical disabilities by providing them with the means to communicate, work, and access information independently. This technology has the potential to significantly improve the overall quality of life for the target user group and enhance their opportunities for social inclusion and employment. Here the invention represents a cutting-edge assistive technology solution that leverages the power of eye-tracking technology to provide physically challenged individuals with a more accessible and inclusive way to interact with digital devices and engage with the modern world.

No. of Pages : 18 No. of Claims : 1

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(57) Abstract :
"Rapid Response" is an innovative personal safety and security device designed to provide individuals, particularly women, with an effective means of summoning help and ensuring their well-being in emergency situations. This electronic device combines GPS and GSM technology to offer real-time location tracking and communication capabilities, making it an invaluable tool for personal safety.The device's primary function is activated by a dedicated SOS button, which, when pressed for at least three seconds, initiates a series of actions. Upon activation, the device establishes a phone call to pre-defined emergency contact numbers, allowing the user to communicate directly with their trusted contacts. Simultaneously, the device accesses GPS coordinates through an integrated GPS module, determining the user's precise location. The working process involves a series of steps that ensure a rapid response to emergencies: SOS Button Activation, Call Connection, Location Retrieval, and Location Sharing. The device's flexibility extends to the capacity to register multiple emergency contact numbers, enabling users to alert a network of trusted individuals in case of an emergency. Furthermore, it offers a remote location request feature, allowing registered contacts to initiate location retrieval even if the user is unable to press the SOS button.

No. of Pages : 11 No. of Claims : 9

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(54) Title of the invention : A SYSTEM AND METHOD FOR INTEGRATION OF INTERNET OF THINGS (IOT) WITH 5G NETWORKS

(51) International classification :H04W0004700000, H04L0067100000, H04L0067120000, H04W0084180000, H04W0074000000
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(57) Abstract :
The present invention relates to a system and method for the seamless integration of Internet of Things (IoT) devices with Fifth Generation (5G) cellular networks. By leveraging adaptive algorithms, this invention dynamically optimizes data transmissions between IoT devices and the 5G network, catering to real-time network conditions, data priorities, and device-specific requirements. Additionally, the invention emphasizes robust security protocols, ensuring data integrity and safeguarding against potential breaches. Provisions for integrating legacy devices and a feedback mechanism further enhance the system's versatility and efficiency, marking a significant advancement in IoT-5G integration technology. Accompanied Drawing [FIGS. 1-2]

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(54) Title of the invention : AN IMPROVED REAL-TIME OBJECT DETECTION CAPABLE OF BEING ADAPTED IN REAL-TIME FOR USE IN TRAFFIC SURVEILLANCE BY UTILIZING R-CNN IN PLACE OF CNN

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(57) Abstract :
[047] This invention presents an improved real-time object detection system for traffic surveillance using Region-based Convolutional Neural Networks (R-CNN). The system incorporates selective search for region proposal generation, CNN-based feature extraction, and region-wise classification to enhance detection accuracy and adaptability. Optimizations such as image pyramid generation, spatial pooling, and efficient feature extraction techniques ensure real-time performance without compromising accuracy. The system leverages domain adaptation, transfer learning, and online learning techniques for adaptability to changing traffic conditions. The proposed invention enables precise and timely object detection, making it valuable for intelligent transportation systems, autonomous vehicles, and video analytics. Its impact lies in advanced traffic management, proactive incident detection, and optimized traffic flow. Accompanied Drawing [FIGS. 1-2]

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(54) Title of the invention : Steve - The Voice Assistant

(51) International classification :G10L0015220000, G10L0015260000, G06F0003160000, G10L0015080000, G10L0015000000
(86) International Application No :PCT// /
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(57) Abstract :
As we know Python is an emerging language, so it becomes easy to write a script for Voice Assistant in Python. The instructions for the assistant can be handled as per the requirement of user. Speech recognition is the process of converting speech into text. This is commonly used in voice assistants like Alexa, Siri, etc. In Python there is an API (Application programminginterface)called SpeechRecognition which allows us to convert speech into text. It was an interesting task to make my own assistant. It became easier to send emails without typing any word, Searching on Google without opening the browser, and performing many other daily tasks like playing music, opening your favorite IDE (Integrated DevelopmentEnvironment) with the help of a single voice command. In the current scenario, advancement in technology is such that they can perform any task with same effectiveness or can say more effectively than us. By making this project, I realized that the concept of AI in every field is decreasing human effort and saving time. This voice assistant can perform many tasks such as sending mails, reading PDF's, playing music, do Wikipedia search, etc. It can perform web browsing with the help of voice commands. It can send messages to our contacts just by our voice commands. It reports weather forecast at any time. We can have some basic conversation with the assistant. Now the basic question arises in mind that how it is an AI The virtual assistant that I have created is like if it is not an A.I, but it is the output of a bundle of the statement. But fundamentally, the mail purpose of A.I machines is that it can perform human tasks with the same efficiency or even more efficiently than humans. It is a fact that my virtual assistant is not a very good example of A.I., but it is an A.I.

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