Patent Search

Invention Title	REAL-TIME STUDENT AND EMPLOYEE ATTENDANCE TRACKING USING FACIAL RECOGNITION AND INTERNET OF THINGS
Publication Number	13/2024
Publication Date	29/03/2024
Publication Type	INA
Application Number	202421015698
Application Filing Date	03/03/2024
Priority Number	
Priority Country	
Priority Date	
Field Of Invention	COMPUTER SCIENCE
Classification (IPC)	G06Q0010100000, G07C0001100000, H04W0004029000, G07C0009280000, H04L0067500000

Inventor

Name	Address	Country	Nat
Dr. Dnyaneshwar P. Pawar	Associate Professor, Department of Psychology, Bhonsala Military College, Nashik, Maharashtra, India, Pincode: 422005	India	Indi
Dr. Dinesh Naik	Principal, Bhonsala Military College, Nashik, Maharashtra, India, Pincode: 422005	India	Indi
Ms. Praveena P	Research Scholar, Department of Computer Science and Engineering, Centurion University of Technology and Management, Vizianagaram, Rollavaka Village, Bondapalli Mandal, Andhra Pradesh, India, Pincode: 535003	India	Indi
Dr. R.S.V. Rama Swathi	Assistant Professor, Business School, Koneru Lakshmaiah Education Foundation, Green Fields, Vaddeswaram, Andhra Pradesh, India, Pincode: 522302	India	Indi
Mr. Banavath Manthru Naik	Research Scholar (Full Time), Department of Electrical Engineering, Andhra University College of Engineering, Andhra University, Visakhapatnam, Andhra Pradesh, India, Pincode:530003	India	Indi
Dr. Nellore Manoj Kumar	Independent Researcher, Founder & CEO, Infinite-Research Organization, B.O, 15-225, Gollapalem, Venkatagiri, Tirupati District, Andhra Pradesh, India, Pincode: 524132	India	Indi
Dr. Malisetty Venkata Suryanarayana	Assistant Professor, Department of Entrepreneurship, GITAM School of Business, GITAM Deemed to be University, Visakhapatnam, Andhra Pradesh, India, Pincode: 530045	India	Indi
Mr. B. Siva Sankar	Assistant Professor, Department of IT, Institute of Aeronautical Engineering, Dundigal, Hyderabad, Telangana, India, Pincode: 500043	India	Indi
Mr. G. Dillibabu	Assistant Professor, Department of EEE, Sri Venkateswara College of Engineering (Autonomous), Tirupati, Andhra Pradesh, India, Pincode: 517507	India	Indi

Applicant

Name	Address	Country	Nat
Dr. Dnyaneshwar P. Pawar	Associate Professor, Department of Psychology, Bhonsala Military College, Nashik, Maharashtra, India, Pincode: 422005	India	Indi
Dr. Dinesh Naik	Principal, Bhonsala Military College, Nashik, Maharashtra, India, Pincode: 422005	India	Indi
Ms. Praveena P	Research Scholar, Department of Computer Science and Engineering, Centurion University of Technology and Management, Vizianagaram, Rollavaka Village, Bondapalli Mandal, Andhra Pradesh, India, Pincode: 535003	India	Indi
Dr. R.S.V. Rama Swathi	Assistant Professor, Business School, Koneru Lakshmaiah Education Foundation, Green Fields, Vaddeswaram, Andhra Pradesh, India, Pincode: 522302	India	Indi
Mr. Banavath Manthru Naik	Research Scholar (Full Time), Department of Electrical Engineering, Andhra University College of Engineering, Andhra University, Visakhapatnam, Andhra Pradesh, India, Pincode:530003	India	Indi
Dr. Nellore Manoj Kumar	Independent Researcher, Founder & CEO, Infinite-Research Organization, B.O, 15-225, Gollapalem, Venkatagiri, Tirupati District, Andhra Pradesh, India, Pincode: 524132	India	Indi
Dr. Malisetty Venkata Suryanarayana	Assistant Professor, Department of Entrepreneurship, GITAM School of Business, GITAM Deemed to be University, Visakhapatnam, Andhra Pradesh, India, Pincode: 530045	India	Indi
Mr. B. Siva Sankar	Assistant Professor, Department of IT, Institute of Aeronautical Engineering, Dundigal, Hyderabad, Telangana, India, Pincode: 500043	India	Indi
Mr. G. Dillibabu	Assistant Professor, Department of EEE, Sri Venkateswara College of Engineering (Autonomous), Tirupati, Andhra Pradesh, India, Pincode: 517507	India	Indi

Abstract:

Our proposed invention introduces a pioneering system for real-time attendance tracking of students and employees using facial recognition technology and the Internet Things (IoT). The system comprises facial recognition-enabled cameras or sensors strategically positioned at entry points, capturing individuals' facial images as they enter premises. These images are processed by a facial recognition algorithm, which compares them against a database of enrolled individuals to determine identity. Upon identification, the system automatically records attendance in real-time, providing instantaneous updates to administrators. Additionally, the system offers remote access management capabilities through IoT integration, enabling administrators to monitor attendance data from any internet-enabled device. This innovative solution promises streamline attendance management, enhance security, and inform decision-making processes within educational institutions and workplaces.

Complete Specification

Description:The proposed system innovates within the field of attendance tracking by leveraging cutting-edge technologies such as facial recognition and Internet of Thir (IoT). By combining these technologies, it offers a real-time solution for monitoring both student and employee attendance seamlessly. This system eliminates the need f manual attendance taking, reducing administrative burdens and potential errors.
Facial recognition technology ensures accurate identification, enhancing security and accountability within educational institutions or workplaces. The integration of IoT enables the system to collect and transmit attendance data instantly, providing administrators with up-to-the-minute insights. This advancement not only streamlines attendance management but also promotes a more efficient use of resources.
Moreover, the system's real-time capabilities empower educators and employers to promptly address attendance discrepancies and take timely actions as needed. Over this innovative solution marks a significant step forward in the realm of attendance tracking, promising increased efficiency, accuracy, and convenience for institutions ar organizations alike.
Background of the proposed invention:

Attendance tracking has long been a staple of educational institutions and workplaces, serving as a fundamental tool for monitoring student and employee participation and punctuality. Traditionally, this process has relied heavily on manual methods, ranging from paper-based sign-in sheets to electronic systems requiring manual input. However, such methods are often time-consuming, prone to errors, and susceptible to manipulation.
Recognizing the limitations of conventional attendance tracking methods, researchers and innovators have continuously sought more efficient and reliable solutions. On

View Application Status