EmpSur

For employee surveillance in Work At Home scenario

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ABSTRACT

Employee monitoring is a growing practise in which companies use digital tools to track work,employee performance, and work in progress. It also help to maintain mental health of employees. Businesses use different monitoring methods to measure productivity,track attendance,assess behaviour,ensure security,and collect proof of hours worked. There's a wide range of what is considered employee monitoring,from proof of work capture to outright surveillance.

Contents

INTRODUCTION

EMPSUR is a novel employee surveillance software to monitor and measure workrate and productivity of employees along with ensuring a stress free and engaging working hours.
This works with the aid of Artificial Intelligence and machine learning to capture live emotions and output tracking.EMPSUR has an AI powered voice assistant which is capable of ensuring immediate assistance and support to employees to overcome difficulties.

EMPSUR is packed with many more features like time tracking,keystroke monitoring,and AI based organising and tracking.Work from home has become the new normal and this is where the significance of EMPSUR comes into effect as it ensures the smoother operations enterprises.

MONITORING EMPLOYEE BEHAVIOUR THROUGH AI

- **Using machine learning and predictive data analysis, management can identify employees who can work well together and drive engagement because of a cohesive work environment.**
- **Monitoring workers will involve processing their personal data and engage the employer's obligations as a data controller.**
- **Analysis the body language of employee and understand the pattern.**

  checking up on appropriate email and internet use to gathering information about productivity, reliability, employee interaction, location and health.

AI BASED EMOTION RECOGNITION AND TRACKING

- Artificial Intelligence implied to analyze and understand human nonverbal signs such as facial expressions, body language, gestures, and voice tones to assess their emotional state. Hence, visual Emotion AI analyses face appearances in images and videos using computer vision technology to analyze an individual's emotional status.
- detecting and monitoring the emotions and provide quick response. The emotions such as excitement, happiness, confusion, sadness, desire and surprise are evaluated,Similarly, the movement of head, eye and whole face are also considered .
- Different techniques such as concentration level measurement and artificial neural network are employed to identify the employees involvement and their interest in the work.. Finally, the emotion artificial Intelligence system will provide the feedback to the teacher to improve the learning environment.

LEGAL WEBCAM TRACKING

- Opens many ways
- It maintains an accurate record of all business hours
- Team based transparency system
- Creates a space for trust
- Visibility level of employee is record and if it varied to zero, It will alert employee and after specified minutes the alert will pass to lead of the team.

EMPLOYEE PRODUCTIVITY TRACKING

- Measure the results through an Ai-driven performance management software.
- Machines can help keep a good track of it and provide the required assessment for improvement.
- Need for employees to collaborate and make decisions.
- Time saving to track employees record.
- Real - time analysis
- Eliminates any form of psychological bias

AI /ML ATTENDANCE TRACKING

GPS BASED ATTENDANCE TRACKING

- Track real time location and task status.
- smart location time and attendance tracking system which is implemented on android mobile application on smartphone reducing the need of additional biometric scanner device.

- The location of an organization has a specific location, which can be determine by the GPS. Each employee's location can be determined by the GPS using smartphone.

WORKLOAD DIVIDING USING AI

- **The tracking of the behaviour and emotion of the employee, the machine got the condition about the employee**
- **The software helps to divide the work or task to teammates and inform the Team Lead about the pressurized or tired conditions how the employee is surviving**
- **This feature will be really helpful to have a good work experience.**

AI VOICE ASSISTANT CALLED OLIVE

- **Olive helps to overcome any difficulties.**
- **Olive helps you by recognizing your difficulties through your changing in behaviour pattern and your facial expressions.**
- **Not only just inform concerned members, but also ensure you to be comfortable.**
- **By cracking jokes, playing music….etc, by analysing your hobbies and understanding what you are interested while you are at a particular emotion.**
- **Olive will ensure employees productivity and mental health.**

AI POWERED ORGANISER

- It uses employee's calendar and track their calendar.
- With help of AI/ML, GPS tracking and ensuring the plans.
- If any change of plans and in change of decided location the live tracking notifies the manager or Team lead.
- The plans set in the calendar will be recorded as the leave from employee and updated to concerned staffs.
- Human may forget something, but machine don't…
- This helps the life of employee and employer more updated and easy.
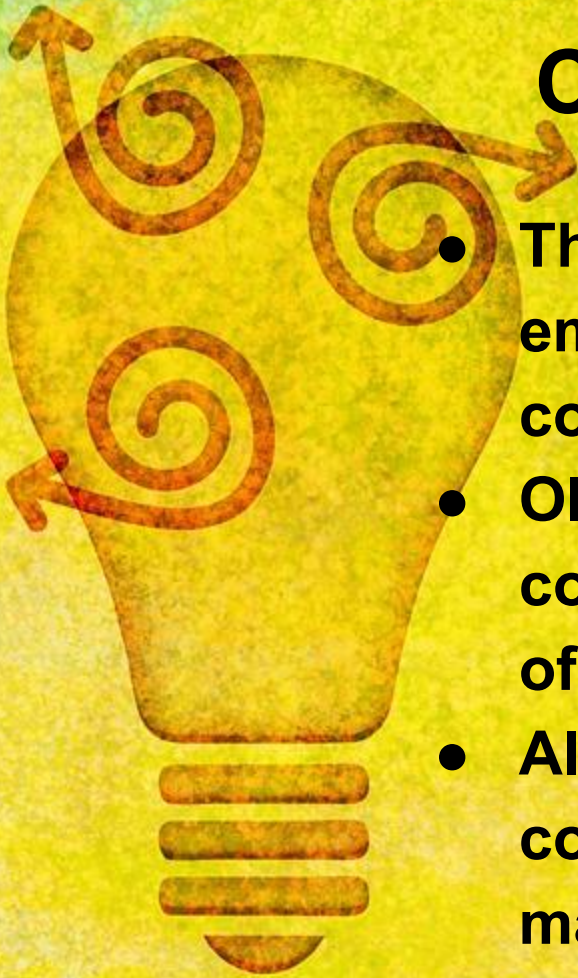
AI BASED KEYSTROKE MONITORING

- **Keystroke And Activity Tracking Feature Helps to Keep track of keystroke and mouse-click activity of remote employees.**
- **Detect and send alerts about suspicious keyloggers, false keystrokes, and prohibited data copy attempts to the managemen.**

TIME TRACKING

- It encompasses planning and creating shifts, managing absences, tracking your staff's productivity, use the Project tracking feature to see who is working on what and for how long, and so much more.

- Total time spent on tasks will automatically be benchmarked against each employees estimates.

- Time tracking breaks down into three main components:
    - Time entry
    - Approvals
    - Reporting.

- This software can help to rightly decide which employees qualify for promotions based on their productivity,work ethics and contribution to company growth.

CONCLUSION

- **The main aim of the project is to ensure employee working effectively and comfortably**
- **Olive will become the employee's companion and helps employer to get best of him.**
- **AI driven attendance tracking,organiser will convert work from home into a systematic manner**

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