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विज्ञान एवं प्रौद्योगिकी विभाग
DEPARTMENT OF
SCIENCE & TECHNOLOGY
सत्यमेव जयते

BITS Pilani
TECHNOLOGY
ENABLING
CENTRE
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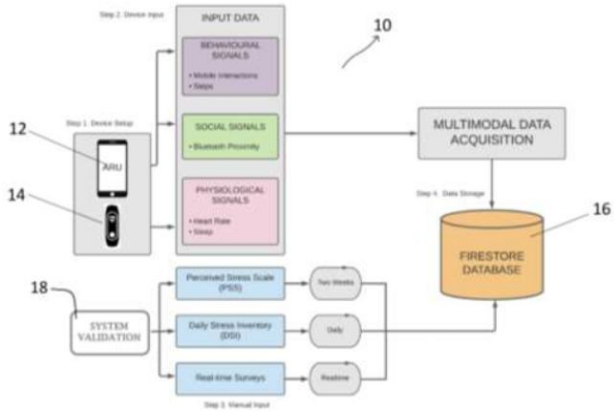
PENDING

(IN202311046855)
Aru - real time multimodal stress prediction framework



NEED

As mental health concerns rise, accurately assessing stress remains a challenge. Traditional methods fail to integrate physiological, behavioral, and self-reported data effectively, missing early detection and personalized intervention opportunities.

TECHNOLOGY OVERVIEW

The system provides a multimodal approach to monitor and predict user stress by combining physiological, behavioral, and social data. Machine learning models process data at various time resolutions to predict stress levels across different categories such as academic, environmental, and psychological.

TECHNOLOGY KEY FEATURES

Multimodal stress detection, machine learning-powered predictions, integration of physiological, behavioral, and social data, real-time stress categorization, personalized stress responses, supports self-reported data, user-friendly interface.

Read more here

MARKET ANALYSIS

The global mental health tech market is expected to grow at a CAGR of 17.6%, reaching $8.1 billion by 2033 (source: Grand View Research, 2023). Key drivers include growing awareness of mental health, increasing demand for accessible mental health solutions, and technological advancements in wearable devices and AI.

Target Industries

Mental Health, Healthcare, and Wellness. , Mental health tech providers, healthcare technology integrators, wellness app developers, corporate wellness programs, and researchers focusing on behavioral health analytics.

AT A GLANCE

- SDG 3 (Good Health and Well-being), SDG 10 (Reduced Inequalities), SDG 9 (Industry, Innovation, and Infrastructure)

Technology is available for licensing/ co-development.

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