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Artificial Intelligence for stress management at workplace: A New Perspective

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Abstract

Stress, poses a huge problem in today's era when our lives have paced up and we are hooked up all the time. It can lead to a spectrum of health problems. Computer aided artificial intelligence systems for diagnosis of stress would enable a more objective and consistent diagnosis and decisions. Several parameters like Body temperature, Blood Pressure, muscle tension and stiffness, and heart rate are clear indicators and can be used by sensors to collect data about an individual and predict his stress levels. This stress creates pernicious effects particularly for employees and business owners. When workers hear artificial intelligence, robotizing the workplace doesn't lend any relaxation, rather creates a sense of insecurity of losing job. Ironically, AI tools may do the opposite, making the workplace more human and keeping work stress at bay. In today's workplace, AI tools are gaining traction. Chatbots and messaging interfaces for tasks like customer support, and client follow-up, can effectively cut out the unnecessary workload and reduce the burden. Automated repetitive tasks that employees do daily leave no room for them to relax. Rather, it drains out the energy and leads to stress. AI can automate for them thus enabling the employees to harness their intellect and skill set for building emotional intelligence, and social interactions which AI can never automate. AI enabled wearable devices, can analyse, and monitor behaviour and emotions. This can identify employees battling with stress. AI-led workplace stress management can play a significant role in diagnosis and cure of stress This will be key to workplace stress management, as you strive towards building a happy, productive, and future-ready workforce.

Biography

Parul Agarwal is associated with Jamia Hamdard since 2002. She is currently an Associate Professor in the Department of Computer Science and Engineering. Her area of specialization include Fuzzy Data Mining, Cloud Computing, Sustainable computing, and Soft Computing. Her particular interest includes applications of Sustainable Computing in Agriculture, transportation and health care. She has published several papers in reputed and SCI, Scopus and Elsevier indexed journals and many book chapters published by CRC press, Springer, IGI-Global are to her credit. She is Editor of two books. The first book titled: "Blockchain for Healthcare systems: Challenges, Privacy and Securing of data" under the book series: "Health informatics and Healthcare: using Artificial Intelligence & Smart Computing" to be published by CRC Press, Taylor and Francis, and to be submitted in April 2021. Another book in the pipeline to be published by Springer and to be submitted in June, 2021. The book is titled: "Smart Technologies for energy and environmental sustainability" under the SCOPUS indexed series: "Green Energy and Technology". She has chaired several sessions of International/ National Conferences of repute. Having Google Scholar Citations of more than 180, h-Index 8 and i-10 as 5. Currently, several PhD. Scholars are working under her supervision in the field of Brain Signalling, Energy minimization in Cloud, Time series forecasting, and Smart Building management for smart cities. She has organized a workshop as Principal Investigator in 2017, on "Use of ICT in sustainable Computing" approved by Department of Science and Technology, Govt. of India, worth 5.75 Lakhs. She has guided more than 40 Masters thesis (MCA and M.Tech.). Member of several committees at university level and membership of several professional bodies like ISTE, IEEE are to her credit.