

Pink Tech Design innovates digitally assuring sanitisation

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Digital Sanitisation Assurance System (DSAS), an Artificial Intelligence and Internet of Things based tool to digitally assure sanitisation as per WHO recommendations



With the onset of COVID-19 and its uncontrollable spread, we need quick solutions to all possible hurdles to effectively fight the pandemic. While medical professionals across the globe are grappling to find a permanent cure to the virus, authorities are urging people to take all possible precautionary measures - practising proper hand hygiene, wearing masks and also, gloves in some cases. The team of Pink Tech Design in collaboration with Nuverse Health Solutions Private Limited have developed an impeccable yet innovative solution in response to the emergency.

In an interesting development, the collaboration has designed Digital Sanitisation Assurance System (DSAS), an Artificial Intelligence and Internet of Things based tool to digitally assure sanitisation as per WHO recommendations. The tool works on three inter-connected systems. When a user signs in with biometric or RFID, the hand sanitisation station detects if the user's hands are sanitised or not, by quantifying the level of hand sanitisation. If it blinks red, it means hands are not clean and if green, it means they are sanitised.

Moreover, the system also does Glove Detection with the use of AI to ensure the user has worn gloves. It can work up to 10 meters from a CCTV camera. It produces records and can be linked with biometrics to produce individual records for offices. With AI, computer vision on CCTV or webcam camera, the system can also detect mask compliance and adherence. It then produces records on the cloud. The level of innovation is higher than one can imagine as nobody can cheat on the mask detection system. AI recognises people trying to cover their faces with their hands.

The system runs API to report adherence and compliance. With adherence database, one can decide further actions like opening gates, generating sanitisation ratings etc. The innovative response to the pandemic has scientific validation. It has reported 94.5% accuracy in hand sanitisation status, 96.7% accuracy in glove detection system, 98% accuracy in mask detection system and 98% users agreeing to a safer and healthier environment because of DSAS.

Speaking about the innovative development, KanavKahol, CEO and Founder of Pink Tech Design said, "We are witnessing a world-changing event which has triggered a wave of fear and anxiety world over. We need to act in an agile manner and focus on innovation. Designed in full response to coronavirus pandemic, our tool focuses on transforming primary health by including sanitisation; preventing sanitisation stigma through AI generated information and enabling technology-based behaviour change."

The reliable and affordable solution that is designed to ensure the protection of the community, conduct sanitisation audit with reports and objectively schedule access whereby one can divide their office or public space into areas with different sanitisation requirements, has received a funding by Biotechnology Industry Research Assistance Council (BIRAC). BIRAC is a Public Sector Enterprise that focuses to strengthen and empower the emerging Biotech enterprises to undertake strategic research and innovation, addressing nationally relevant product development needs.

Mukesh Mhatre CEO of Nuverse Health Solutions Pvt Ltd said, "Realising the importance of the system in COVID like pandemic scenarios and post COVID scenario, we have designed this tool to minimise the risk of the pandemic and health security threats. We look forward to implementing the AI-enabled contactless system across all offices and public spaces."