Abstract

Industries around the world have become complex and augmented. Given the structural characteristics of modern industrial buildings, quick evacuation using emergency exits or evacuee guidance markers during blackouts due to fire, building collapse, earthquakes, or aging of industrial buildings need to be possible. An industrial fire is a type of industrial disaster involving a conflagration which occurs in an industrial setting. Industrial fires often, but not always, occur together with explosions. They are most likely to occur in facilities where there is a lot of flammable material present. This paper suggests an Internet of Things (IoT)-based intelligent fire detection and emergency response system that can control directional guidance intelligently according to the time and location of a disaster using fuzzy logic and the design of an integrated control system using sensor networks to address the problems with existing fire emergency response systems in times of fire disaster.

References

2. MD Iftekharul Mobin, MD Abid-Ar-Rafi, MD Neamul Islam and MD Rifat Hasan, “An intelligent fire detection and mitigation system safe from fire (sff)”, International journal of computer applications (0975 - 8887), volume 133 - no.6, January 2016.


11. AUTHORS PROFILE

12. Vishal B. Rawat, BE, Computer Science and Engineering Student at Brahma Valley College of Engineering and Research Institute, Nashik under University of Pune.

13. Mangesh A. Singh, BE, Computer Science and Engineering at Brahma Valley College of Engineering and Research Institute, Nashik under University of Pune.

14. Swati A. Suryawanshi, BE, Computer Science and Engineering at Brahma Valley College of Engineering and Research Institute, Nashik under University of Pune.

15. Priti S. Chabukswar, BE, Computer Science and Engineering at Brahma Valley College of Engineering and Research Institute, Nashik under University of Pune.

16. Hemant D. Sonawane, ME, BE Computer Engineer was educated in Pune University. Presently he is working as a Head of Computer Department of Brahma Valley College of engineering and Research Institute, Nashik, Maharashtra, India. He has presented papers at National and International Conferences and also published paper in National and International Journals on various aspects of Computer Engineering and Networks.

Index Terms

Computer Science  Information Sciences
Keywords

Internet of Things, Wireless sensor networks, Evacuation, Fire detection, Integrated Control System, fuzzy Logic