

Pre-Emptive Smart Fan System to Avoid Suicide by Hanging

Sushma Shivani K S¹, Sowmya M S², Anoop Sai S³, B.Harshith⁴ Suma Udnoor⁵

Students, Department of E&IE^{1,2,3,4,5}

JSS Academy of Technical Education, Bengaluru, Karnataka, India

sushmashivaniks2k29gmail.com

Abstract: According to the most recent study from the World Health Organization, India has the highest suicide rate in the South-East Asian area. India's suicide rate was estimated at 10.4 suicides per 100,000 persons in the study released the day before World Suicide Prevention Day in 2019. Because of the depression people experience, the suicide rate has soared since the corona virus epidemic began. Suicide is most frequently committed by hanging oneself from a fan. The global rate of hanging suicide is quite concerning. According to a report by the Indian government's National Crime Records Bureau (NCRB), quite a few hanging instances are documented each year. The majority of hanging cases are typically suicidal. The likelihood of a homicidal case leading to a hanging scene is exceedingly high. The crime scene must be examined on several key points in an undisturbed state, followed by an autopsy analysis, in order to differentiate between suicidal and homicidal hangings. Many other systems have been suggested to stop these cases. Thus, the primary goal of this study is to decrease the number of suicide attempts that occur, and these prevention techniques will aid in saving lives in order to address this issue.

Keywords: Suicide, Hanging, Ceiling Fan, Micro-controller, Sensor, IOT

REFERENCES

- [1]. S. Sankaranarayanan and A. Periasamy, "Approach for Preventing Suicide on Ceiling Fan", IJRAMT, vol. 2, no. 4, pp. 74–76, Apr. 2021.
- [2]. Mishra A., Gunji B., Deepak B.B.V.L. "A New Safety Design of the Ceiling Fan to Avoid Suicidal Cases". In: Chakrabarti A. (eds) Research into Design for a Connected World. Smart Innovation, Systems and Technologies, vol 134, 2019.
- [3]. Raghavendra S Narsapur, Basavaraj P Hiremath, Dr. B. M. Jayadevappa, "A Novel Approach on Ceiling Fan Based System to Avoid Suicide by Hanging", INTERNATIONAL JOURNAL OF ENGINEERING RESEARCH & TECHNOLOGY (IJERT) NCRACES (Volume 7, Issue 10), 2019.
- [4]. Prabha Sundaravadivel Paola Salvatore Premananda Indic, "M-SID: An IoT-based Edge-intelligent Framework for Suicidal Ideation Detection", The University of Texas at Tyler, TX, USA. Belmont. November 05, 2020. IEEE.
- [5]. Wassim Bouachir², Rafifik Gouiaa³ and Rita Noumeir⁴ 134 Ecole, "Real-time recognition of suicidal behavior using an RGB-D camera Bo Li", detechnologie superieure LICEF research center, TELUQ University, Montreal (QC).
- [6]. S. Berrouguet¹, R. Billot, P. Lenca, P. Tanguy¹, E. Baca- Garcia M. Simonnet B, "Toward E-Health Applications for Suicide Prevention", Gourvennec Institut Mines- Telecom, Telecom Bretagne, France. 2015 IEEE First Conference on Connected Health: Applications, Systems and Engineering Technologies 2016.
- [7]. M. E. Larsen et al., "The use of technolog in Suicide Prevention", 2015 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), pp. 7316-7319, 2015.
- [8]. P. Bharti, A. Panwar, G. Gopalakrishna and S. Chellappan, "Watch-Dog: Detecting Self-Harming Activities from Wrist Worn Accelerometers", in IEEE Journal of Biomedical and Health Informatics, vol. 22, no. 3, pp. 686-696, May 2018.
- [9]. O. Keskes and R. Noumeir, "Vision-Based Fall Detection Using ST-GCN," in IEEE Access, vol. 9, pp. 28224-28236, 2021.

- [10]. K. D. Varathan and N. Talib, "Suicide detection system based on Twitter," 2014 Science and Information Conference, pp. 785-788, 2014.