IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 2, Issue 1, June 2022

Baby Monitoring System

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Abstract: These days handling kids and being with them all the time has become a crucial task for working parents. Being attentive to the kid and being physically present with them is not possible for each working parent. Thus, an efficient solution has been encountered to take care of the child while working. A smart cradle with features like swing mechanism, Camera facility and a small toy has been implemented. ESP32 controller is used, ESP32 CAM Module, Motor Driver, & a DC Motor are the key components of the project. The project will work as a 2-way input system, i.e., the system can be controlled manually via the Blynk App. Whenever the cy is detected, swing motion will be started, even after that if the cry is detected again, then the toy will be played with the help of the Bo Motor. Thus, automatically for a time period the baby is entertained, and an attempt to sooth the baby without any personal attention will be accomplished through the prototype designed.

Keywords: Smart Cradle, ESP32, ESP332 CAM Module, Toy, Blynk App, Swing Mechanism

REFERENCES

- [1]. Waheb A. Jabbar, Hiew Kuet Shang, Saidatul N. I. S. Hamid, Akram A. Almohammedi, Roshahliza M. Ramli, Mohammed A. H. Ali. IOT-BBMS: Internet of Things-Based Baby Monitoring System for Smart Cradle. In July 2019 in part by the Universiti Malaysia Pahang. IEEE
- [2]. Rabéa Cheggou, Siham Si hadj mohand, Oussama Annad, El hadi Khoumeri. An intelligent baby monitoring system based on Raspberry PI, IoT sensors and convolutional neural network. Published in 2020 2020 IEEE 21st International Conference on Information Reuse and Integration for Data Science (IRI).
- [3]. Madhuri P. Joshi, Deepak C. Mehetre published a research paper titled IoT Based Smart Cradle System with an Android App for Baby Monitoring in 2017 Third International Conference on Computing, Communication, Control And Automation (ICCUBEA).
- [4]. Anju Krishna G S, Harsha Ponnamma Dev, Lekshmi C M, Sneha Suresh K, Rejani S5. Paper titled "Smart Cradle By Using Messaging & Sensing Technology" was published in May 2019 under International Research Journal of Engineering and Technology (IRJET).
- [5]. TU Ji-hui, Zhou Quan. "Design And Implementation Of The Crying Voice Detection Circuit In The Baby's Supervision System". Published under International Information and Engineering Technology Association.
- [6]. Binu P K, Akhil V, Vinay Mohan. Smart and Secure IoT based Child Behaviour and Health Monitoring System using Hadoop.
- [7]. Alhagie Sallah, Prabha Sundaravadivel. Tot-Mon: A Real-Time Internet of Things based Affective Framework for Monitoring Infants. Published in 2020 IEEE Computer Society Annual Symposium on VLSI.
- [8]. N Lakshman Pratap, K Anuroop, P Nirmala Devi, A Sandeep, Sunanda Nalajala. IoT based Smart Cradle for Baby Monitoring System. Proceedings of the Sixth International Conference on Inventive Computation Technologies [ICICT 2021].
- [9]. Natasha Saude, Dr. P A Harsha Vardhini. IOT Based Smart Baby Cradle System using Raspberry Pi B+.
- [10]. Wervyan Shalannanda, Irma Zakia, Erwin Sutanto, Fahmi Fahmi. Design of Hardware Module of IoT-based Infant Incubator Monitoring System. Published in 2020 IEEE.

DOI: 10.48175/568