

IoT Based Smart E-Mirror using OpenCV with Raspberry PI

Yash Deshmukh¹, Kashmira Pihulkar², Jayesh Dahake³, Bhagyashri Dholwade⁴, Suryakant Bhonge⁵

Students, Department of Electronics and Telecommunication^{1,2,3,4}

Professor, Department of Electronics and Telecommunication⁵

P. R. Pote (Patil) College of Engineering and Management. Amravati, India

yashdeshmukh870@gmail.com, kashmirapihulkar098@gmail.com, jayeshdahake29@gmail.com

bhagyashridholwade11@gmail.com, suryakant.bhonge@gmail.com

Abstract: *This paper describes the design, construction and working of an IoT based smart mirror. Every morning our day begins by watching ourselves at least once in mirror before leaving our homes. We interact with it psychologically to find out how we look and how our attire is. Smart Mirror or Magic Mirror is one of the applications of Raspberry Pie. A computer screen embedded in mirror looks very futuristic. The Raspberry Pie stays at back scenes and controls the data displayed on mirror. While looking at mirror you can look at various notifications from social sites as well news, weather forecast and more things. Such mirrors can be programmed to work as AI and control home appliances by voice input or touch screen. The Raspberry Pi is connected to monitor via HDMI as well as it also has inbuilt Wi-Fi and Bluetooth interfaces so we can just swipe music and videos to mirror.*

Keywords: smart mirror, magic mirror, virtual mirror, Homeautomation, Raspberry pi.

REFERENCES

- [1] Y. Sun, L. Geng and K. Dan, "Design of Smart Mirror Based on Raspberry Pi," 2018 International Conference on Intelligent Transportation, Big Data & Smart City (ICITBS), Xiamen, 2018, 10.1109/ICITBS.2018.00028. pp. 77-80. doi:
- [2] M. M. Yusri et al., "Smart mirror for smart life," 2017 6th ICT International Student Project Conference (ICT ISPC), Skudai, 2017, pp. 1-5. doi: 10.1109/ICT- ISPC.2017.8075339.
- [3] F. Ok, M. Can, H. Üçgün and U. Yüzgeç, "Smart mirror applications with raspberry Pi," 2017 International Conference on Computer Science and Engineering (UBMK), Antalya, 2017, 10.1109/UBMK.2017.8093566. pp. 94-98. doi:
- [4] O.Gomez-Carmona and D. Casado-Mansilla, "SmiWork: An interactive smart mirror platform for workplace health promotion," 2017 2nd International Multidisciplinary Conference on Computer and Energy Science (SpliTech), Split, 2017, pp. 1-6.
- [5] Lakshami N M, Chandana M S, Ishwarya P, "IoT based smart mirror using RaspberryPi"..
- [6] D'Souza, A. A., Kaul, P., Paul, E., & Dhuri, M. (2019). Ambient Intelligence Using Smart Mirror Personalized Smart Mirror for Home Use. 2019 International.
- [7] Piyush Maheshwari, "Smart Mirror: A Reflective Interface to Maximize Productivity" International Journal of Computer Applications (0975-8887) Volume 166 – No.9, ay 2017. 9. Njaka, A. C., Li, N., & Li, L. (2019).