

A Revolutionary New Approach to Biometrics: Systematic Study

Ms. Namrata Sonawane¹, Mrs. Akshata Chavan², Mrs. Pooja Devrukhkar³

Student¹, M.Sc.IT., I.C.S. College, Khed,

Assistant Professor, Department of I.T.^{2,3}

I.C.S. College, Khed, Ratnagiri

Abstract: *Biometrics are a way to identify people using their own personal info. The goal of biometrics is to keep the data safe and secure. There are lots of different types of biometrics, but some are really popular because of how easy they are to use and how secure they are. Biometrics come in two types: physiological and behavioural. Physiological biometrics include things like faces, fingerprints, irises, and signatures. All these systems are covered in this paper. Biometrics work in three main ways: enrolment, verification, and identification. Enrolment is when patterns are taken from people and stored in databases. Verification is when the system checks if the pattern belongs to the user or not. Identification is when the user uses their own biometrics to verify that the data belongs to them. All three levels represent the functional levels of the biometric system. In the early days of biometrics, it was only used at the ground level to provide a basic level of security to the data. Today, it is playing an important role in ensuring the security of our data. Not only is biometrics used in everyday life in the form of phone unlock, phone assistant, attendance system, etc., but it is also being used at the advanced level in the form of airports, border control, cloud computing, etc. This research paper will explore the future scope and scope of biometrics and how it may even transform the future.*

Keywords: Biometrics, Recognition, Security, Identification, Authentication

REFERENCES

- [1]. P. Divya Bharathi, V. Pranav Raj, P. Suresh Kumar, S. Venkata Narayana Reddy, "Food Management based on Face Recognition", International Journal of Innovative Science and Research Technology, Volume 7, Issue 5, Page 1502-1505, May 2022.
- [2]. Ms M. R. Rajput, G. S. Sable, "Gender Prediction Based on Iris Recognition", International Journal of Innovations in Engineering Research and Technology, Volume 6, Issue 11, Page 13-19, November 2019.
- [3]. Souhail Guennouni, Anass Mansouri, Ali Ahaitouf, "Biometric systems and their applications", March 1st, 2019.
- [4]. Sunil Swamilingappa Harakannanavar, Prashanth Chikkanayakanahalli Renukamurthy, Kori Basava Raja, "Comprehensive Study of Biometric Authentication Systems, Challenges and Future Trends", Volume 10, Issue 4, Pages 3958-3968, January 2019.
- [5]. Alex Nasonov, "What's the future for biometrics in global payments?", Biometric Technology Today, Volume 2017, Issue 8, Pages 5-7, September 2017.
- [6]. R. Das, "The application of biometric technology" (accessed on October 20, 2016)
- [7]. Anil K. Jain, Arun A. Ross, Karthik Nandakumar, "Introduction to biometrics", First Edition, New York, Springer, 3 November 2011.
- [8]. Davide Maltoni, Dario Maio, Anil K. Jain, Salil Prabhakar "Handbook of fingerprint recognition", Second Edition, Springer, Verlag, London, 2009.