

BIOMETRIC ATM



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This is certify that the seminar titled “ **BIOMETRIC ATM** ” was presented by **SHAMNA P S** (REG NO.19130605) in partial fulfillment of the requirement for the award of Diploma in computer engineering under Directorate of Technical Education, Kerala State during the academic year **2020-2021**.

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ABSTRACT

Most of the ATMs in the past have been using ID cards to identify users but with the wide acceptance of Biometrics, a new generation of Biometrics ATMs are being deployed for a wide range of applications worldwide. It based authentication is a potential candidate to replace password-based authentication. Biometric tokens are the safest means of preventing ATM fraud. The main reason for introducing biometric systems is to increase overall security. Biometrics offers greater security and convenience than traditional methods of personal recognition.

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CONTENTS

CHAPTER	TITLE	PAGE NO.
	CERTIFICATE	
	ABSTRACT	3
	ACKNOWLEDGEMENT	4
	CONTENTS	5
1	INTRODUCTION	6
2	WORKING	7
3	ADVANTAGES	8
4	DISADVANTAGES	9
5	APPLICATIONS	10
6	ISSUES IN CURRENT ATM	11
7	CONCLUSION	12
8	REFERENCE	13

CHAPTER 1. INTRODUCTION

- biometric refers to the automatic identification of a person based on his psychological/ behavioral characteristics.
- Various type of biometric system are being used for real time identification most popular are based on face recognition and fingerprinting matching.
- Most of the ATM in the past have been used id card to identify users but with the wide acceptance of biometrics a new generation of biometric ATM are being deployed for wide range of applications worldwide
- Biometric based on the indication is a potential candidate to replace password based authentication.

CHAPTER 2. WORKING

1. FINGERPRINT

- It needs to get an image of your finger.
- It needs to determine whether the pattern of ridges and valleys in this image matches the pattern of bridges and valleys in the prescanned image.
- Only specific characteristics which are unique to every fingerprint are filtered and saved as an encrypted biometric or mathematical representation.

2. HAND

- Dimensional shape of a person hand has several advantages as an identification device.
- Scanning a hand and producing a result takes 1.2 seconds. Little space for data storage about 9 bytes which can fit easily magnetic strip credit cards.

CHAPTER 3 . ADVANTAGES

- Uniqueness
- Universality
- User friendly
- Accuracy
- Comfort

CHAPTER 4.DISADVANTAGES

- Costly.
- Facial image can also hinder accurate identification.
- Missing or injured body part problem.
- False acceptance and rejections.
- The scanning of eyes is fearful to some people.

CHAPTER 5.APPLICATIONS

- Banking and finance
- Food coupons/Tickets/ Canteen ATM
- Membership verification ATM
- Transaction / check deposit ATM
- Self service ATM
- Retail ATM

CHAPTER 6. ISSUES IN CURRENT ATM NETWORKS

- ATM card frauds
- Use of ATM card duplicators
- Card sharing by family and friends
- Inability to trace the wrongful users
- ATM pins can be shared on phone or recorded using secret cameras.

CHAPTER 7. CONCLUSION

- Biometric provide strong authentication
- The main reason for introducing biometric system is to increase overall security.
- Biometric offers greater security and convenience then traditional methods of personal recognition
- The biometric system is only one part of an overall identification or authentication process and the other parts of that process will play and equal role in determining its effectiveness .

CHAPTER 8. REFERENCE

- <https://www.bioenabletech.com/biometrics-atm>
- <https://www.redhat.com/en/blog/biometrics-drives-atm-emergence-edge-device>