

PROJECT REPORT ON
AUTHENTICATION USING FINGER VEIN RECOGNITION

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ABSTRACT

Security is a major concern in today's world due to the increased rate of crimes and identity thefts. To overcome this problem there is a great need for efficient authentication and authorization systems. Among the many authentication systems that have been proposed and implemented, finger vein biometrics is emerging as the foolproof method of automated personal identification. Finger Vein is a unique physiological biometric for identifying individuals based on the physical characteristics and attributes of the vein pattern in the human finger. This project aims at developing a system for acquiring images of finger veins and processing them using MATLAB for the purpose of authentication. It includes designing of hardware for image acquisition, coding the matching algorithm for processing the finger vein pattern and training and testing of algorithm module. The system we have implemented gives satisfactory results in recognising the individuals based on their finger vein patterns.