

Fingerprint Scanner Examination Hall using Arduino

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Abstract: *The objective of this research project is to develop an authentication system for exam halls based on fingerprints using Arduino technology, which will prevent impersonation during exams. Fingerprint biometrics will also be utilized for the retrieval of results and certificates, allowing this objective to be divided into three primary subtasks: image preprocessing, feature extraction, and feature matching. A mix of both classical and contemporary methods from existing literature are evaluated for each subtask, leading to the creation of a comprehensive fingerprint recognition solution for demonstration purposes.*

Keywords: Biometrics, fingerprints, and authentication

