**ECG BIOMETRIC AUTHENTICATION: A COMPARATIVE ANALYSIS**

**Objective:**

The main aim of this paper is biometric authentication and identification. This project is implemented to protect the data and devices. By considering Electrocardiogram (ECG) dataset better authentication is possible. This authentication mainly involves filtering type, segmentation, feature extraction, and health status on ECG biometric by using the evaluation metrics.

**Hardware & Software Requirements:**

**Software:** Matlab R2020a.

**Hardware:**

**Operating Systems:**

• Windows 10

• Windows 7 Service Pack 1

• Windows Server 2019

• Windows Server 2016

**Processors:**

Minimum: Any Intel or AMD x86-64 processor

Recommended: Any Intel or AMD x86-64 processor with four logical cores and AVX2 instruction set support.

**Disk:**

Minimum: 2.9 GB of HDD space for MATLAB only, 5-8 GB for a typical installation

Recommended: An SSD is recommended a full installation of all Math Works products may take up to 29 GB of disk space

**RAM:**

Minimum: 4 GB

Recommended: 8 GB

**Project Flow:**

Filtering

Feature extraction1

Enrollment

Dynamic Time warping

Matching or not

Filtering

Feature extraction2

Verification

Figure: Block diagram of proposed method.