

10.10 11:57 AI Based Diabetes Prediction System 1. Gather data: Collect a large dataset of diabetes-related information, including patient demographics, medical history, and test results.

2. Preprocess data: Clean the data by removing duplicates, handling missing values, and normalizing the features.

3. Feature selection: Identify the most relevant features that contribute to diabetes prediction.

4. Train the model: Use machine learning algorithms like logistic regression, decision trees, or neural networks to train the model on the labeled dataset.

5. Evaluate the model: Assess the performance of the model using evaluation metrics like accuracy, precision, recall, and F1-score.

6. Fine-tune the model: Optimize the model's hyperparameters to improve its performance.

7. Validate the model: Test the model on a separate dataset to ensure its generalizability.

8. Deploy the system: Integrate the trained model into a user-friendly interface or application for real-time diabetes prediction.