

# Cardiac Arrhythmia Detection Report

Generated on February 28, 2026 at 14:13:51 | AI-Assisted ECG Analysis System

## Patient Information

Record ID:	105
Analysis Date:	2026-02-28 14:13
Signal Duration:	2.0 seconds (720 samples @ 360 Hz)
Lead:	MLII (Modified Limb Lead II)

## Prediction Result

### Normal Sinus Rhythm Detected

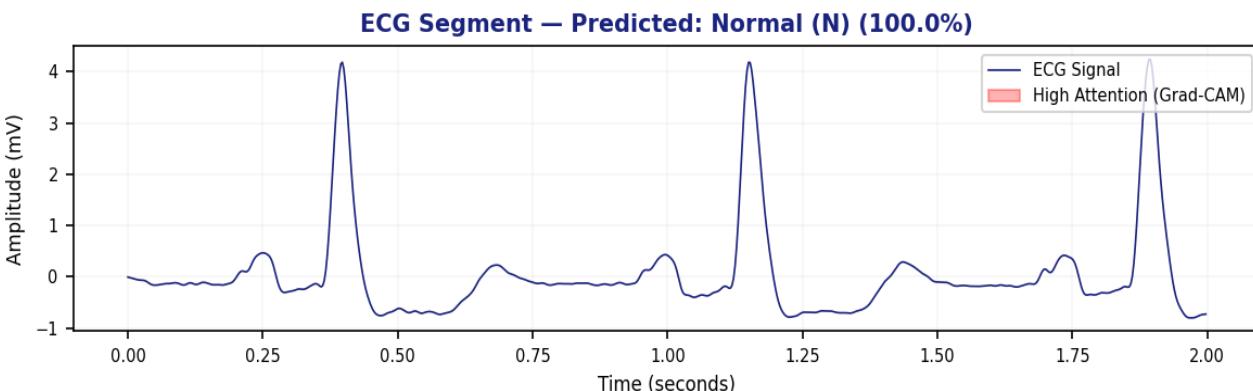
Predicted Class:	Normal (N)
Confidence:	100.0%
Noise Level:	0.0%

## Class Probabilities

Class	Probability
N	99.96%
S	0.02%
V	0.01%
F	0.01%
Q	0.01%

## ECG Signal with XAI Heatmap

Red/warm regions indicate high contribution to the prediction. These highlighted areas correspond to morphological features that the AI model considers most important for its classification decision.



## Model Explanation (Grad-CAM)

The model shows diffuse attention across the ECG segment for 'Normal (N)' prediction.

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**DISCLAIMER:** This report is generated by an AI-assisted academic prototype system and is NOT intended for direct clinical use. All predictions should be reviewed by a qualified healthcare professional. This system is designed for research and educational purposes only.