

Cardiac Arrhythmia Detection Report

Generated on February 28, 2026 at 13:20:12 | AI-Assisted ECG Analysis System

Patient Information

Record ID: 232
Analysis Date: 2026-02-28 13:20
Signal Duration: 2.0 seconds (720 samples @ 360 Hz)
Lead: MLII (Modified Limb Lead II)

Prediction Result

✓ Normal Sinus Rhythm Detected

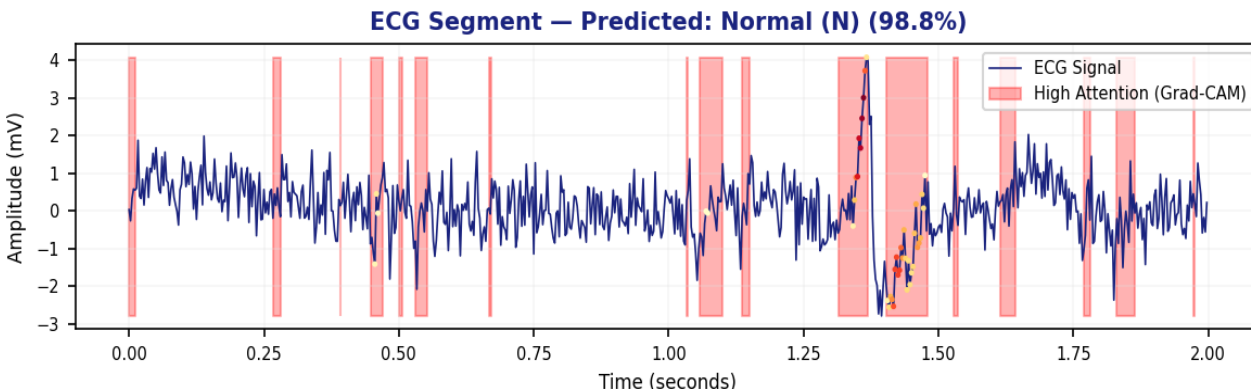
Predicted Class: Normal (N)
Confidence: 98.8%
Noise Level: 85.0%

Class Probabilities

Class	Probability
N	98.75%
S	0.22%
V	0.07%
F	0.95%
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)

Red/warm regions indicate high contribution to the 'Normal (N)' prediction. Key attention zones: samples 164–166, samples 385–386, samples 483–492, samples 506–531. These regions likely correspond to morphological features characteristic of Normal (N).

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.