# AlertCardio Wearable Arrhythmia Detector: Cardiologist-on-Chip

#### Claim:

Compact, low power, reliable ECG waveform analysis based on parallel delta modulator and artificial intelligent algorithm on integrated circuits for arrhythmia detection.

#### **Novelties:**

- Performs real-time signal processing and send alert immediately once arrhythmia was detected
- Reduces circuit complexity and power consumption through a non-conventional digital system

#### **Features:**

- Operates only in low speed and low data capacity, thus it will be a complement of current devices
- Technology is compatible with commercially available manufactures
- Circuit design simplicity provides competitive solution for wearable medical devices

#### Milestones to Date:

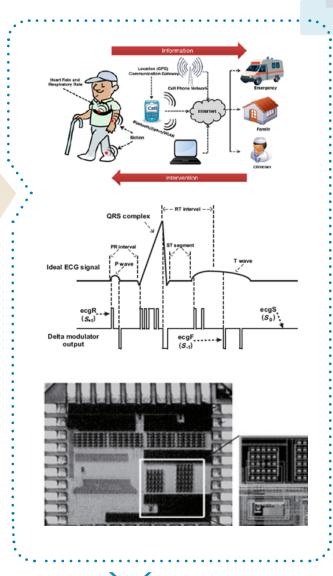
- Completed prototype, Dem-Val tested, and evaluated against current methods
- Completed literature review
- Academic research papers accepted

### **Potential Applications:**

- Arrhythmia detection
- Heart failure prevention
- Immediate feedback for health monitoring
- Help caregivers

## **Industry Leaders and Potential Partners:**

- Abbott
- Medtronic
- GE health care





#### INVENTOR(S) EXPERTISE

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