

EKG Armband

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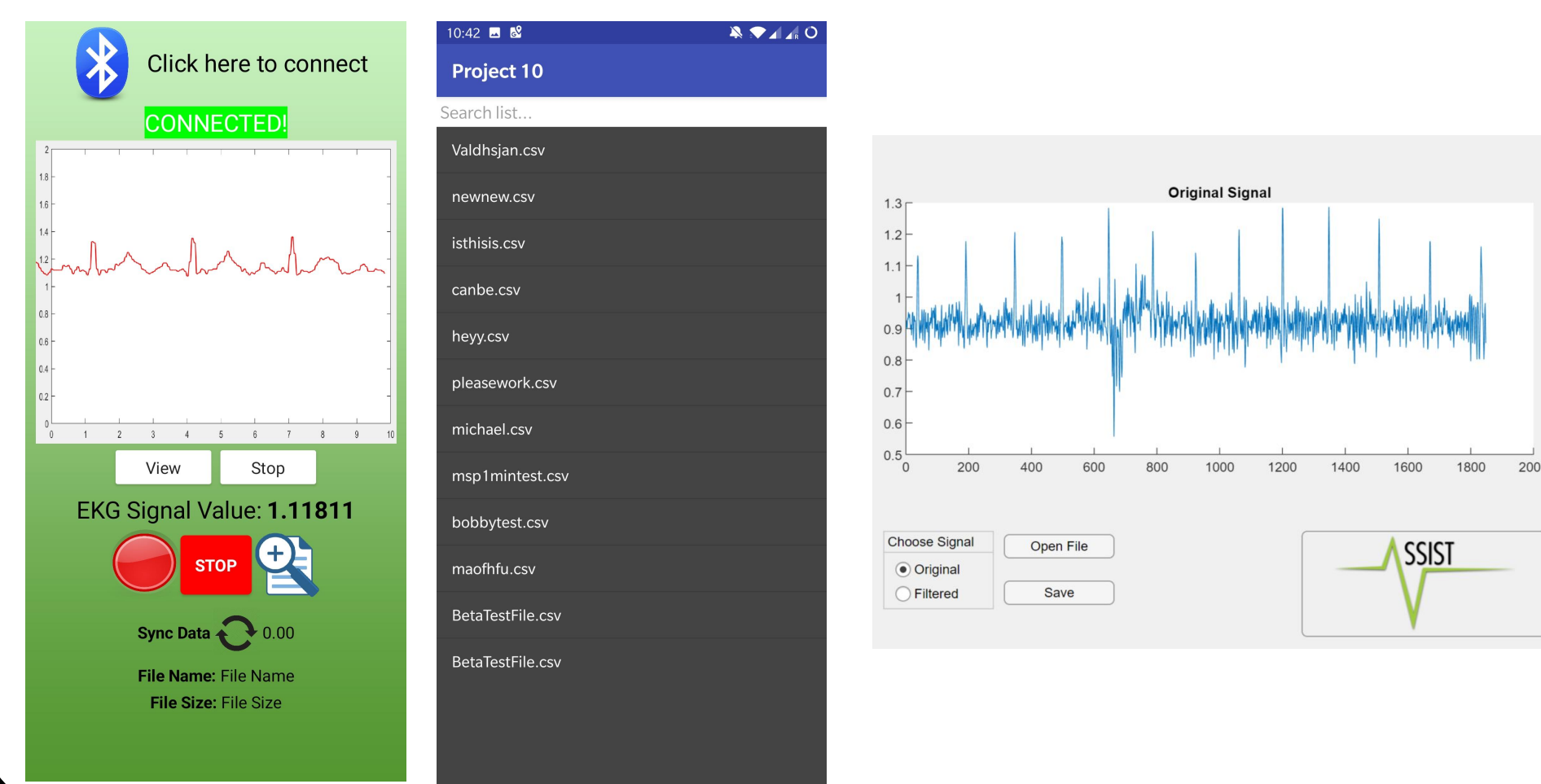
Prof. Bobby Compton
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Problem Statement: Develop a low-powered, wireless, and non-intrusive heart monitoring device.

Product Requirements

- Produce EKG signal with clear PQRST wave
- Wirelessly transmit data
- Must be powered for 12 hours

User-Interface



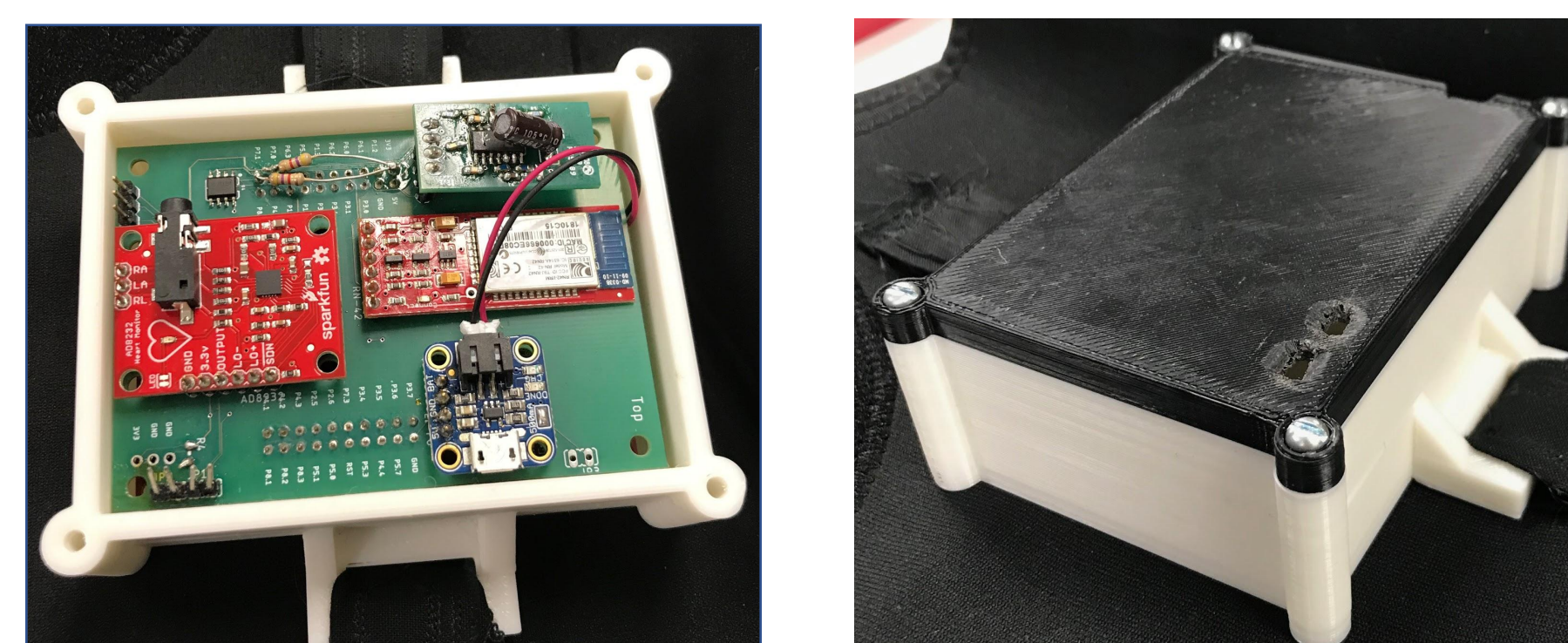
Customer Product



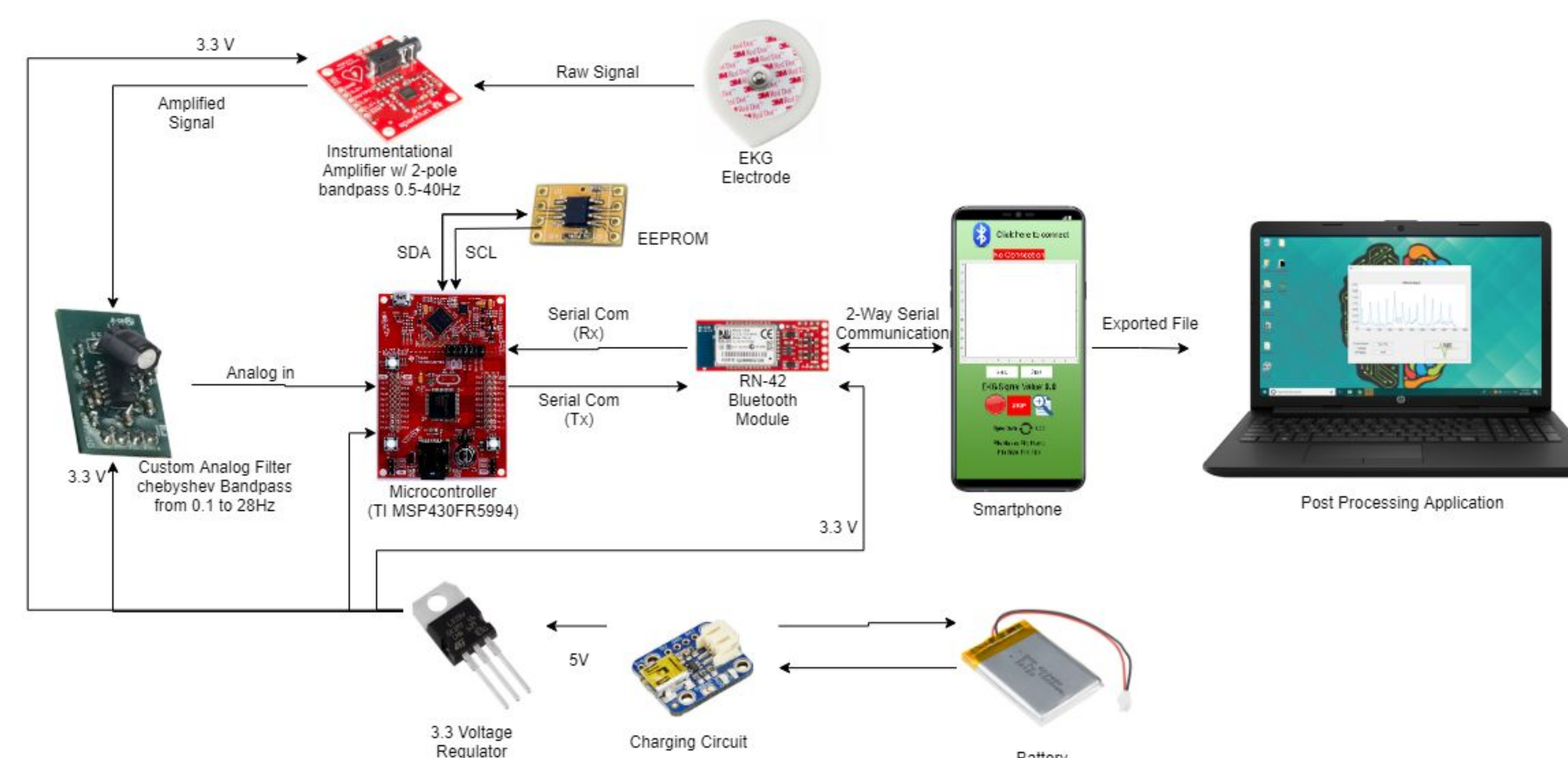
Major Milestones

- Custom PCB and 3D printed housing
- Bluetooth connectivity
- Real time data transmission
- Functional analog and digital signal processing method
- User-friendly smartphone app
- Post-processing app

Enclosure Design



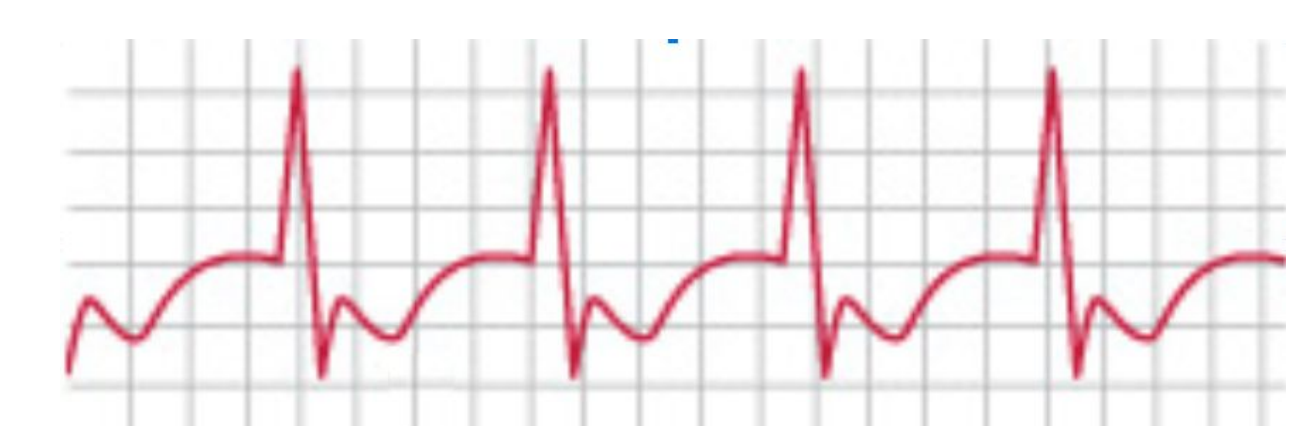
System Diagram



PQRST



Normal



Angina