

# Development for Patient Monitoring

## Background

- Vital parameters of ICU patients need to be monitored
- Wired setups are prone to false alarms due to loose cables, cost time during changeovers, and pose increased hygienic risk
- Goal: wireless standard that meets hospital requirements

## Your Task

- Software development for wireless ECG prototype
- Implementation of subchannel allocation algorithms
- Measurements & evaluation

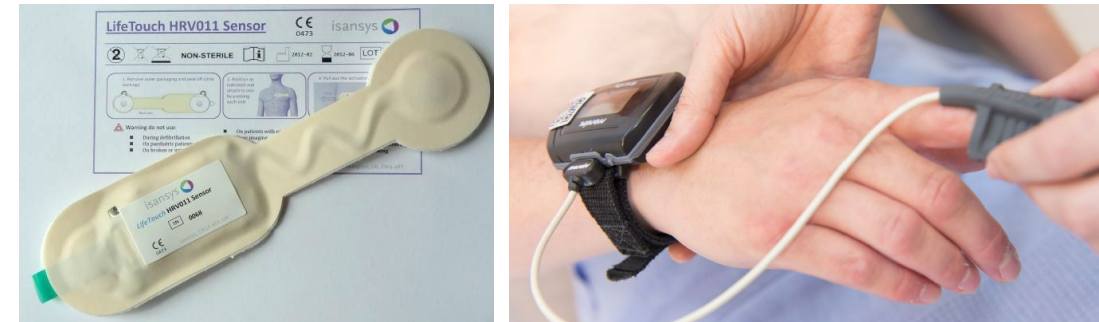
## Your Skills

- Interest in working with embedded systems and hardware
- Experience in C++ programming, preferably also in Python/MATLAB

## Your Opportunities

- Hands-on experience: with wireless hardware and SDRs, visit ICU at University Hospital Dresden
- Learn about wireless channels, signal processing, ECG
- Work in a motivated inter-disciplinary team

ICU Intensive Care Unit • ECG Electrocardiography • SDR Software-Defined Radio



State-of-the-art wireless sensors are proprietary and not optimized for reliability

