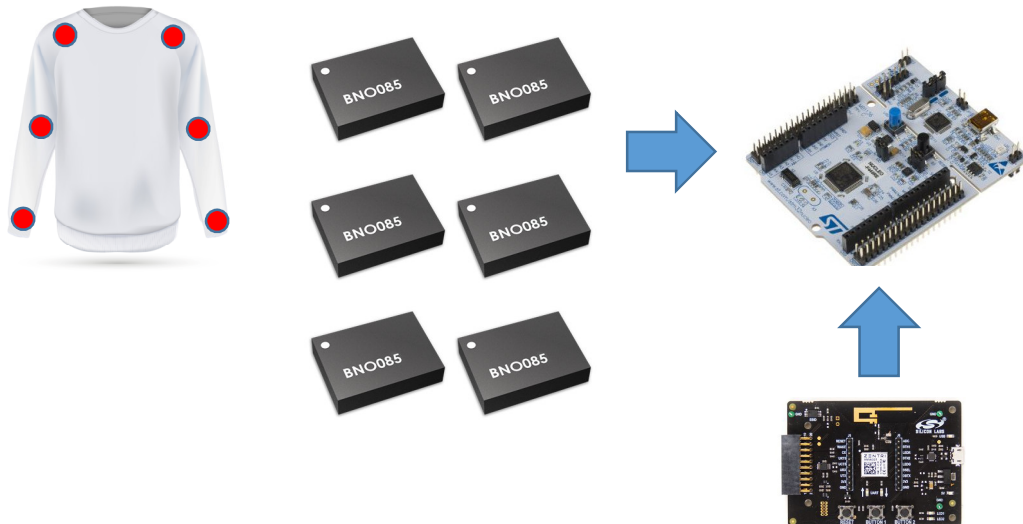


Construction of a motion tracking system with inertial sensors

The movement of the upper body of a person, e.g. sitting in a wheelchair, should be detected with inertial sensors, which are installed in a shirt.

For this purpose, a prototype with several IMUs should be created. The acquisition of the sensor data should be done with a microcontroller (STM32 NUCLEO). The system should also transfer the data via Wi-Fi (Wi-Fi Xpress) to a PC.



Your tasks:

- Extension of the existing prototype with just one IMU with additional sensors (6 pieces)
- Completion of the prototype with Wi-Fi functionality
- Documentation

Your profile:

- Fundamental interest and understanding of electronics and hardware related software
- Ideally, experience with prototype platforms, e.g. Arduino
- Knowledge in the programming language C++
- Independent and structured way of working and enjoyment of experimenting

If you are interested, please contact:

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