Implementation of a Medical Communication Protocol

The next generation of communication networks, namely 6G, will enable a huge variety of medical applications. In the current phase, our research focuses on optimizing the interaction between network and medical application development. For this, we joined forces with the Minimally Invasive Interdisciplinary Therapeutical Intervention (MITI) group, sitting at the hospital "Rechts der Isar".

This research internship focuses on a certain use case, the mobile patient monitoring of patients in the operation room. In particular, the vital parameters of the patient are continuously measured and sent to a server. The task of the research internship is to develop and implement the communication protocol between the sensors and the processing server. Hereby, a basic implementation is already given. However, key components are still missing, which should be implemented and evaluated within the scope of this research internship.

Please note, that the real setup is located at MITI. You may have to work there.

Prerequisites

- Motivation
- Knowledge about Python and Linux
- Basic communication (protocol) principles

Advisors

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