



Protocamp course

Device and sensor for infrastructure measurement

The goal of the project is to develop a IoT device that can measure as much information as possible from infrastructures, such as elongation (stress-strain curve) and motion (e.g. deflection, torsion). The environment where the device would be used is mobile network base station. The device can be situated in each structural parts (e.g. prestressing Steel or wire) of different kinds of mobile network base towers. The measurement should be done taking privacy issues into consideration, for example, all the calculations are done in the device and only metadata (stress, strain etc.) is sent to a cloud service.

In addition to the device development, new possibilities for sensors in structural health monitoring (SHM) should be considered. For instance, durability of sensors and devices is in focus because those should be in the structures more than twenty years. One example for discussions is so called energy harvesting.

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Company info:

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