

Hallway Monitoring with Sensor Networks

Tobias Baumgartner, Sándor P. Fekete, Alexander Kröller

Our hallway sensor network in Braunschweig, Germany. It can monitor people as they pass by, using 180 load sensors and 30 sensor nodes. The testbed will be available to the public: <http://wisebed.eu>.

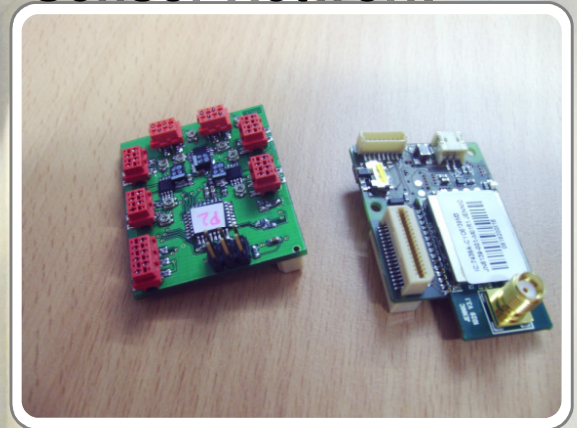
The construction is highly affordable: approx \$15 per sensor (compare with \$300 for industrial load cells). Accuracy was not a design concern.

Load Sensors



- Strain gauge glued to steel plate
- Measure strains in terms of nanometers
- Affordable construction: approx. \$15 per sensor

Sensor Network



- iSense nodes (Coalesenses GmbH)
- Six strain gauges connected to one sensor node
- 30 sensors beneath the floor
- Standardized, remote access to testbed

