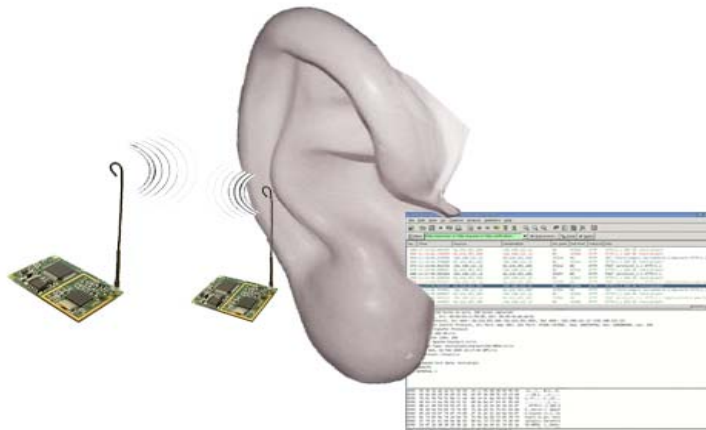


## Semester Thesis “Traffic Monitoring in Sensor Networks”

The inherently distributed nature of sensor networks leads to all sorts of new problems regarding the monitoring of applications and protocols in such networks. One way to trace the operation of a particular application is to log the transmitted messages. Therefore we deploy specific sensor nodes inside the network that overhear all traffic sent over the wireless medium.



In this thesis you will develop a traffic monitoring tool that gathers the output of potentially multiple overhearing sensor nodes. That is, you will implement a java application which merges logging information of different sniffing nodes and provides a graphical user front-end to facilitate the reconstruction of protocol behavior in a sensor network.

The goal of this thesis is to come up with a light-weight protocol analyzer for sensor networks (an equivalent to the ethereal application in wired networks).

### Required

- Advanced Java and C programming skills
- Interest in working with an embedded platform

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