

Semester/Master thesis “A wireless real-time network for roller coasters”

Motivation and Informal Description

Monitoring and controlling roller coaster cars (carrriages) is necessary to ensure safety and great entertainment at roller coasters. Wireless real-time monitoring is demanding. Typical delays can only be in the hundreds of milliseconds at best, while controlling 100 or more individual objects.

The thesis includes, the design, implementation and evaluation of a communication protocol with real sensor nodes. (Potentially, but not necessary – depending on your interest and time the design of a new board, integration of a solar panel etc.) The project is in *cooperation with a company*. The system will be tested on a real roller coaster or a suitable test track. Thus, the project includes (a few) **field trips**.



Requirements

Any student is welcome to apply for the thesis! Good programming skills are recommended and a basic knowledge of wireless communication is an advantage. The student should be a hands-on person, who likes building things in a workshop and also enjoys seeing his things work under real conditions.



Interested? Please contact us for more details!

Contact

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