

## Semester/Diploma/Master Thesis “Ad-Hoc Game”

In a mobile ad-hoc network hosts equipped with radio communicate without any stationary infrastructure. Since the transmission range of radio equipment is limited, hosts will be able to communicate directly only as long as they are close enough to each other. In most cases, however, communication will be possible, even if the destination of a message is too far away from the source to hear it directly: Intermediate nodes will relay the endpoints' messages hop by hop. This process is commonly called *multihop routing*, which plays a central role within the scope of ad-hoc networks, together with a variety of other concepts.



In this thesis you will design and implement a game for an ad-hoc network. For this purpose the design of the game will have to meet the following conditions:

- Mobility will be an integral part of the game. It should not be possible or at least not fun to play the game sitting on the same spot throughout the game.
- It will be necessary to ensure communication of distant network nodes by (explicit or implicit) multihop routing.
- It would be nice if the design of the game did not include a central server node.

In the course of the exercises of the lecture Mobile Computing we built a mobile ad-hoc network based on notebook computers with Wireless LAN network cards. The experience you gained during these exercises will be of great help for this thesis.

### Skills

- Experience gained in exercises of lecture Mobile Computing

### Contacts

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