

Prof. Roger Wattenhofer

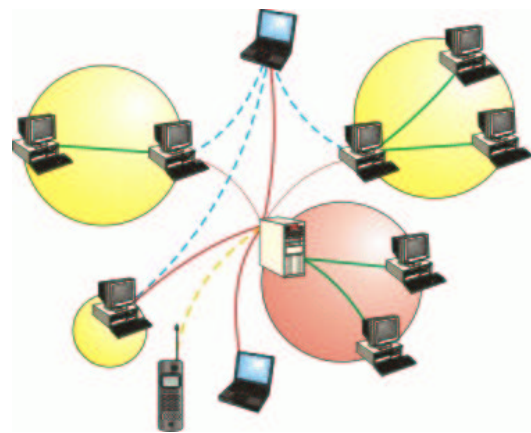
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Semester/Diploma/Master's Thesis "Embedding of Graphs"

Various networks, be it the Internet or proposed ad hoc and sensor networks, can be modelled as graphs with certain properties. Numerous applications have arisen where assigning coordinates to the nodes in the network plays a crucial role. For instance, if we assign *virtual coordinates* to nodes in a network, then we can route efficiently by exploiting the success of geographic routing schemes. This research direction can be considered as trying to embed graphs in two (or higher) dimensional Euclidean space.



There are numerous open questions of theoretical nature. Alternatively or as an extension, you can also simulate the algorithms to evaluate their success.

Skills

- Interest in algorithms and theory;
- and/or strong programming skills (preferably Java).

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