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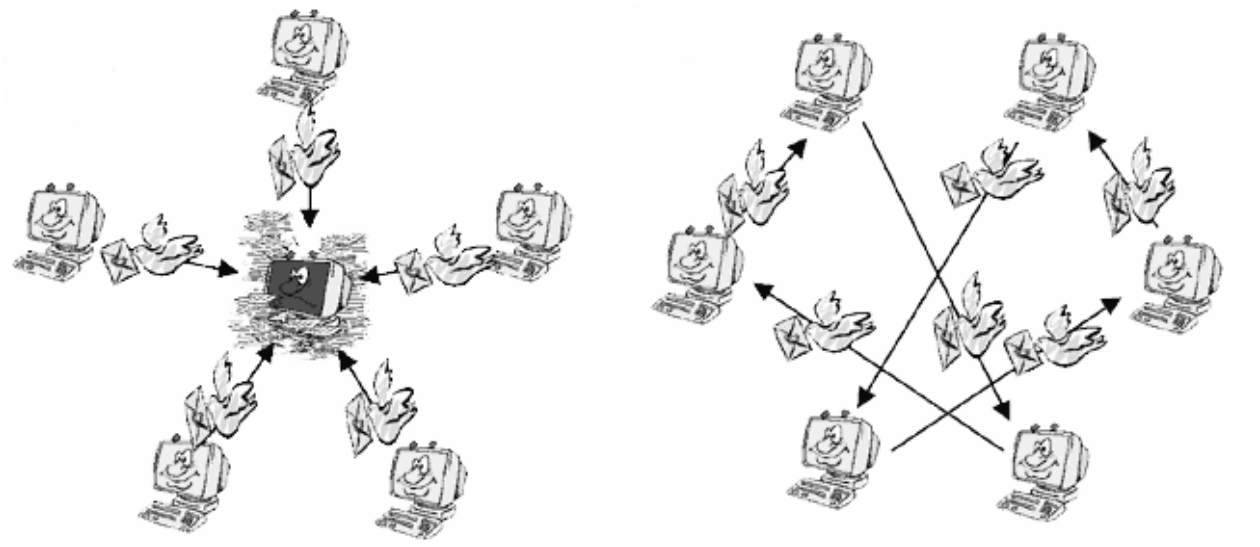
Diplomarbeit/Semesterarbeit “Peer-to-Peer Computing”

After a first wave of successful Internet applications, such as electronic mail or the World Wide Web, we are currently witnessing a second wave of distributed applications, which are often dubbed “peer-to-peer”. Peer-to-peer computing is the sharing of computer resources and services by direct exchange between client systems, so that there is no “central” server that is a security risk and might eventually become a bottleneck. These resources and services often include the exchange of information (Gnutella), or processing cycles (distributed.net). Peer-to-peer computing takes advantage of existing desktop computing power and networking connectivity, allowing off-the-shelf clients to leverage their collective power beyond the sum of their parts.



In our research group we are studying and implementing various aspects of peer-to-peer computing systems. In this Diplomarbeit/Semesterarbeit we will together identify one of these aspects and study it from an algorithmic point of view, and/or implement a small-scale prototype system.

Skills: Distributed computing/algorithms and/or network implementation.
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