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Rumor mongering (also known as gossip) is an epidemiological protocol that implements broadcasting with a reliability that can be very high. Rumor mongering is attractive because it is generic, scalable, adapts well to failures and recoveries, and has a reliability that gracefully degrades with the number of failures in a run. In this paper we present a protocol that superficially resembles rumor mongering but is deterministic. We show that this new protocol has most of the same attractions as rumor mongering. The one attraction that rumor mongering has - namely graceful degradation - comes at a high cost in terms of the number of messages sent. We compare the two approaches both at an abstract level and in terms of how they perform in an Ethernet.

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CarNet is an application for a large ad hoc mobile network system that scales well without requiring a fixed network infrastructure to route messages. CarNet places radio nodes in cars, which communicate using Grid, a novel scalable routing system. Grid uses geographic forwarding and a scalable distributed location service to route packets from car to car without flooding the network. CarNet will support IP connectivity as well as applications such as cooperative highway congestion monitoring, fleet tracking, and discovery of nearby points of interest.

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