



UCL Department of Computer Science
CS M038/GZ06: Mobile and Cloud Computing
Spring 2014
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One-pager: GPSR (Karp and Kung, 2000)

Due: Start of lecture, 22nd January 2014

Instructions: in your own words, answer the following question as succinctly as possible (in 200–500 words, but shorter answers within this range are encouraged). Quoting figures or text from the assigned reading or from any other source is specifically prohibited.

Suppose a wireless network includes one or more *unidirectional* links: links where connectivity exists in one direction, but not in the other direction. Suppose that in such a network, one or more paths exist between a source node S and a destination node D . Will GPSR always find one of these paths (*i.e.*, and route successfully from S to D)? If you answer affirmatively, explain why the GPSR algorithm will always succeed on such topologies. If your answer is no, give a counterexample topology.