

UCL Department of Computer Science CS M038/GZ06: Mobile and Cloud Computing Spring 2014 Kyle Jamieson and Brad Karp

One-pager: Roofnet (Bicket et al., 2005)

Due: Start of lecture, 17th 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.

In Figure 10 in the paper, the authors compare the throughput achieved on multi-hop paths in Roofnet (y-axis) with that predicted by the ETT metric (x-axis). Clearly, the achieved throughput often falls short of the throughput predicted by the ETT metric.

Why does the ETT metric tend to overpredict the throughput of a path? Refer to the details of the definition of the ETT metric in your answer, and any relevant assumptions made by this definition that may not hold in deployment.