

Computer Networking (CN) - 2017/18

Assignment 2

In this assignment, you are required to read the following four recent research papers on the broad topic of transporting data simultaneously over multiple diverse wireless interfaces on smartphones.

1. A. Nikraves et al., "[An In-Depth Understanding of Multipath TCP on Mobile Devices: Measurement and System Design](#)," in *Proceedings of ACM MobiCom*, 2016.
2. Y. Guo et al., "[Accelerating Multipath Transport Through Balanced Subflow Completion](#)," in *Proceedings of ACM MobiCom*, 2017.
3. Q. De Coninck et al., "[A First Analysis of Multipath TCP on Smartphones](#)," in *Proceedings of Passive and Active Measurement (PAM) Conference*, 2016.
4. Q. De Coninck et al., "[Observing Real Smartphone Applications over Multipath TCP](#)" in *IEEE Communications*, Vol. 54, No. 3, 2016.

Your task is two-fold:

1. Write a review for each of these papers (no more than an A4 page for each paper). For this task, you will find it helpful to follow the advice in **[Keshav07]** and **[Mitzenmacher]**. The quality of the review you write for a paper is judged by your ability to clearly and succinctly summarize the paper's contributions, evaluate the importance and difficulty of the problem tackled in a larger context, identify strengths and weaknesses of the proposed approach, seeing relationships with other work/problems you encountered before and identifying possibilities for future work.
2. Write a survey (no more than 2 A4 pages) on the specific topic that ties together the above listed four papers. You are welcome to look at additional papers that you think are related, e.g., by following the references or other more recent papers citing these papers. The quality of the survey is judged by your ability to summarise the above four papers in a single coherent document focusing on how each of them contribute to the broader topic and how they relate to each other, thereby indicating the state-of-the-art on the topic in question and opportunities for further work; necessarily, the quality of your survey indirectly depends on the quality of your reviews.

Assessment

This assignment is worth 10% of the overall course mark (or 40% of the coursework mark). You will receive marks for your work on this assignment on a scale of 0-100: maximum 15 marks for each paper review, and a maximum of 40 marks for the survey.

Submission

The deadline for this assignment is 4pm on Friday, 23rd March 2018. You must submit a printed version of your submission consisting of individual paper reviews and the survey to the ITO by the deadline. Also make an electronic submission via the *submit* command.

No late submissions are allowed, except under extenuating circumstances as per the [School of Informatics policy on late submission of coursework](#).

You are expected to work on this assignment on your own. Or else, you will be committing plagiarism (see [School of Informatics guidelines on plagiarism](#)); such acts will be seriously dealt with as detailed under [the university page on academic misconduct](#).

References

- **[Keshav07]** S. Keshav, "[How to Read a Paper](#)," ACM SIGCOMM Computer Communication Review (CCR), Vol. 37, No. 3, July 2007.
- **[Mitzenmacher]** M. Mitzenmacher, "[How to read a research paper](#)."