Assignment 3: Improved analysis for H-FPPS

In [1], Davis and Burns presented analysis of hierarchical fixed-priority pre-emptive scheduling (H-FPPS). Although that analysis was claimed to be exact, it has been shown in [2] and [3] that the analysis is actually pessimistic. Notably, the motivation for classifying the original work to be pessimistic in [2] and [3] are quite different.

For this assignment, you have to study these three articles and

- explain why the original analysis in [1] is pessimistic, i.e. what was the cause of the pessimism;
- discuss [2] and [3], e.g.
  - do the claims hold;
  - are the results in [2] and [3]
    - based on the same or different assumptions;
    - complementary or is one approach generalized by the other.

You are expected to give a 25 minutes presentation (including time for questions) about your results.

References


Further information

In case you have any questions concerning this assignment, please contact:

Reinder J. Bril,
email: r.j.bril@tue.nl.