

VU Scheduling Approaches in Distributed Systems.

Task 4 – "Application Dynamism".

Student/Group:

- Daniel Eberharter

General Feedback:

Nice solution. You have correctly identified the lack of a representative system model as the main problem when statically optimizing dynamic systems. Just like in your implementation, the solution typically goes into the direction of estimating a model which sufficiently reflects the characteristics of the system which are most relevant to the optimization problem (e.g., worst- or average-case makespan). A few minor remarks:

- From the SA point of view, I personally think that a Decorator (extending the PropertyProvider and doing the whole max operations internally) would be better suited to address this situation, since it would allow you to use the evaluators from the previous tasks without introducing any changes. If you are interested, you could check out this video to see an explanation on the **decorator** (the whole playlist is pretty awesome).
- To be honest, I am not sure whether a solution which does the summarizing of an entire batch of samples each time is better than one which just obtains the assumed max (average) once at the start and then uses them throughout the optimization. One thing you should keep in mind is that, for a real problem, obtaining data samples often comes with actual cost, so that working with a large number of samples in each evaluation could not only take longer, but also be pretty expensive.
- Minor comment about the wording: In the last point of your result discussion, you say that the results you obtained have a higher quality. I would rather say that they are more representative of the real system. Higher quality would mean, e.g., a lower makespan.

Code Feedback:

- Good comments (+)
- Checking assumptions and throwing exceptions (+)

Summary:

Overall, a very nice solution. Well done!

Best regards,

Fedor