

Reader

For the project seminar:

“Online Monitoring of Complex Conditions for Event-based Distributed Architectures”

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Resources for the project seminar:

For acquiring a working understanding (preferably in this order)

- [1]: a beginner’s intro to mathematical logic, pp. 1-11 (until Polish notation), 16-21 (from subsection 2.2), 29-31 (from subsection 2.5)
- [2]: introduction to temporal logic and types of properties, check only the LTL part
- [3]: introduction to online monitoring (from our point of view), check only Sections 1 and 2

Other topics To get a broader view on the topic

- [4]: High-level comparison to CEP
- [7]: Comparison of Online Monitoring to testing and static verification

Tools Tool manuals, examples (how-to and reference for the assignment)

- [5]: MonPoly (MFOTL)
- [6]: DeJaVu (QTL)

References

- [1] <https://www.win.tue.nl/~keesh/ow/2if85/Ben-Ari3rd.pdf>
- [2] <https://people.eecs.berkeley.edu/~sseshia/fmee/lectures/TemporalLogicIntro.pdf>
- [3] <https://www.sciencedirect.com/science/article/pii/S1567832608000775>
- [4] https://link.springer.com/chapter/10.1007/978-3-319-46982-9_6
- [5] <https://easychair.org/publications/download/62MC>

- [6] https://repositories.lib.utexas.edu/bitstream/handle/2152/62875/fmcad17_proceedings.pdf?sequence=2#page=128
- [7] <http://www.cse.chalmers.se/~ahrendt/papers/FormaliSE18.pdf>