

Seminar **Event Stream Processing**Notes on Reviews

Summer Term 2016

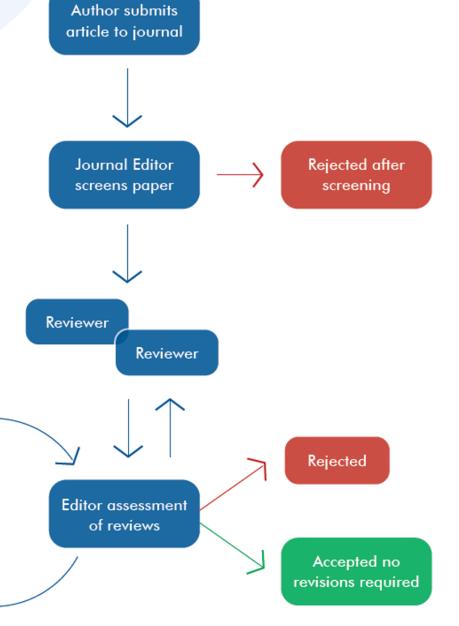
Matthias Weidlich



The Role of Peer Reviews

Author makes

revisions



Some General Remarks



On peer reviews by Brian Lucey:

- **1. Be professional:** It's called peer review for a reason...
- **2. Be pleasant:** Don't say things in a review that you would not say to the persons face.
- 3. Read the invite
- **4. Be helpful:** Easiest thing in the world to poke holes in something usually it is orders of magnitude harder to suggest how to fix them
- 5. Be scientific: Remember that in the end the paper is not about style but substance until and unless the style gets in the way
- 6. Be timely and swift
- **7. Be realistic:** About the work presented, changes you suggest and your role
- **8. Be empathetic:** As you review, so shall you be reviewed, on average
- **9. Be open:** Specialists and generalists both have a role to play in the review process
- **10. Be organized:** A review is, like a paper, communication. It therefore requires structure and a logical flow.

Organisation



- 1) Summary of paper
- 2) Good things about the paper
- 3) Major comments
- 4) Minor comments
- 5) Final Evaluation

Summary



This needs to be only 1-3 sentences, but it demonstrates that you understand the paper and, moreover, can summarize it more concisely than the authors in their abstract.

The paper defines the task of simplifying a process model represented as a Petri Net, and then presents a compilation of the simplifying task into an oversubscription planning task. The goal of this work is to take a Petri Net (representing a business process model) as input and generate as output a simplification of such net, within a given bound on the total duration of the process.

This paper addresses the problem of automated generalization of process models derived from logs of real-world events, using oversubscribed planning techniques as the mechanism to drive the generalization.

Strong Points



This introduction is good psychology if you want the authors to revise their paper.

The paper provides strong motivation for the work: prior approaches to process model generation are either manual, ad hoc, or fail to preserve desired performance-related properties.

This is an interesting paper introducing a promising and mathematical well-founded approach for the abstraction/simplification of process models. The machinery is quite heavy, but the algorithms work in practice and also scale to the instance size needed.

Major Comments



- Discuss the author's assumptions, technical approach, analysis, results, conclusions, reference, etc. Be constructive, suggest improvements.
- Focus on 2-3 key issues raised in the article. Make clear the authors' own argument before you criticise and evaluate it. Support your criticisms with evidence from the text or from other writings.

I also miss relationships with the schedule-aware workflow models of Ronny Mans et al. These have been used for workflow management (enactment) and simulation.

The contents of the paper are not well balanced. The real theoretical contribution is limited to the contents of Section 4 (one page), while the rest of the paper is devoted to the formal definition of the problem and of the background (e.g., the ASP theoretical framework).

However, this work only makes sense if the provided transformation is "correct" in the sense that it preserves behavioural properties. Surprisingly, this paper makes no statement about this correctness.

Minor Comments



- This section contains comments on minor aspects, such as style, figures, grammar, graphs, etc., but also parts that need minor clarification or missing links to related literature. If any of these are especially poor, then they might escalate to the 'major comments' section.
- It is acceptable to write these comments in list (or bullet) form.

Section 3. p.4: "One can eliminate labels by ..." what is it good for ? Apparently it plays a role in Definition 3.3 but it should be made clear from the start.

Terminology in section 5 is odd. Behavior refers to control-flow conformance. Behavior, operation, and validity are given very particular and partly counterintuitive semantics.

- in eq 6, mention what \beta stands for. I know that it is defined in the appendix, but you are presenting here the equation.

Verdict



A final evaluation of the overall contribution that the article has made to your understanding of the topic.

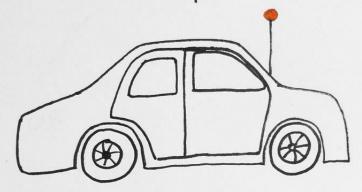
The above points need to be addressed in the final version of the paper. I suggest a weak or conditional accept.

The paper is well written and it is a serious work. We suggest to accept the paper.

So, I think that this paper can be a valuable contribution for this conference provided it contains results about validity of the model / the transformation. Without such results I do not suggest acceptance.

Your manuscript as submitted





... and after peer review and revision

