Tephilla Prince <183061002@iitdh.ac.in>

[Research] BMC+LTL+SMT Tool

Tephilla Prince <183061002@iitdh.ac.in> Thu, Apr 7, 2022 at 3:42 PM
To: Ramchandra Phawade <prb@iitdh.ac.in>, Sheerazuddin S <sheeraz@nitc.ac.in>

Dear Sir

Please find the forwarded email from Prof.Yann Thierry-Mieg,LIP6 (highlighted).

Based on searching online and Prof.Yann's reply, it seems like there are no BMC tools that have preceded ours.

Thanks
Tephilla

---------- Forwarded message ---------
From: Yann Thierry-Mieg <yann.thierry-mieg@lip6.fr>
Date: Thu, Apr 7, 2022 at 3:21 PM

To: Tephilla Prince <183061002@iitdh.ac.in>

Hi,

>tools to perform bounded model checking for petri nets using linear temporal logic, queried using SMT/SAT.

I'm not sure what you mean,

* LTL tools yes,

* BMC tools usually are for reachability properties rather than LTL, I guess one could try to encode using BMC the problem of reachability inside the product with an automaton, but I don't know of a tool that attempts that

* queried with SAT/SMT is usually the case when talking about BMC, that is what most ppl have in mind.

Currently ITS-tools does use a layer of SMT when solving LTL, we try to prove simpler assertions we call "knowledge" and combine them to simplify or even prove the property. But I would not call that BMC.

Best regards

ytm

==
= Yann Thierry-Mieg
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Le 2022-04-07 07:48, Tephilla Prince a écrit :
> Dear Prof.Yann
>
> I am a student researcher from IIITDh, India.
> We had interacted earlier regarding ITS-Tools.
>
> I would like to know, if you are aware of any tools to perform bounded model checking for petri nets using linear temporal logic, queried using SMT/SAT.

>
> Thank you very much for your time.
>
> Regards
> Tephilla