

Spanning Trees

- A tree is a graph without cycles.
- A rooted tree is a graph with a designated node as the root
- Each node has exactly one parent.
- A spanning tree of a graph is a tree where every node in the graph is also in the tree.

Links

- I will put links and slides and a timetable for meetings on my webpage.
 - <http://user.it.uu.se/~justin/Teaching/index.html>
- I will be available other times, but it is best to book via email since I'm often busy.

Example

- Your job is to use spin to validate the distributed spanning tree algorithm.
- There are some problems and questions that have to be solved.
- You can not actually verify the algorithm for arbitrary networks using spin. You'll have to pick a number of networks and verify it.

Report

- You should work in pairs.
- You are to produce the following
- Code etc (Promella files and whatever)
- A report

Report

- The report should contain the following
 - Justification of your model. You must be very careful to state all assumptions about how the algorithm is modeled. In particular pay particular attention that you really do capture the asynchronous nature of the communication.
 - Justification of your test, you must explain what your LTL formulas actually prove.

Modeling and Exam

- You might have add extra variables in the code to actually prove statement about the correctness of the algorithm.
- The project along with your other exercises should take about three weeks
- The exact deadline will be announced on the web. But it will be about a week before the exam (16th March).

Meetings

- I want to have about 3 meetings with each group.
 - The first meeting after you have thought about the problem
 - The second meeting in the middle to see how you are getting on
 - The final meeting before you hand in the report.
Note that your report should be well written and well presented (use latex), in can be in English or Swedish.