

System Structure and Behavior

Read through page 5 of “An Introduction to Chordal Graphs and Clique Trees”. This gives an intuition into the role that structure plays in the analytical complexity of a system which is roughly proportional to the sum of the sizes of the cliques of variables. Keep this in mind as you are creating block diagrams.

1 Exercises

1. For your class project, create 2 different block diagrams of the same system with different property assignments or objects for each one.
2. Create also parametric diagrams using constraints that tie the variables together to illustrate the relationships between the variables.
3. For each of these block diagrams, attempt to identify the smallest variable elimination ordering.
4. Identify the clique structure implied by the variable elimination orderings.