

## Lecture #7: Temporal reasoning

What are the core properties of ordering relation used to model time?

What is major difference between qualitative and quantitative approaches to time?

What does it mean that a temporal database is consistent?

Which relation is redundant at the temporal network at slide 9 (Point algebra – minimal networks).

Can we efficiently check consistency of PA networks?

Describe all thirteen possible relations between two intervals.

Can we efficiently check consistency of IA networks?

Is it possible to translate IA network to a PA network?

Is IA network at slide 12 (Interval algebra – consistency) consistent?

What is the relation between qualitative algebra, point algebra, and interval algebra?

What type of temporal constraints are used in simple temporal networks?

Can we efficiently check consistency of simple temporal networks?

What is a distance graph?

What is the difference between TCSP and disjunctive temporal problem?

How can we check consistency of disjunctive temporal problems?

What is difference between Temporal Networks with Alternatives and disjunctive temporal networks?

Find some direct application of temporal reasoning (outside planning and scheduling).