

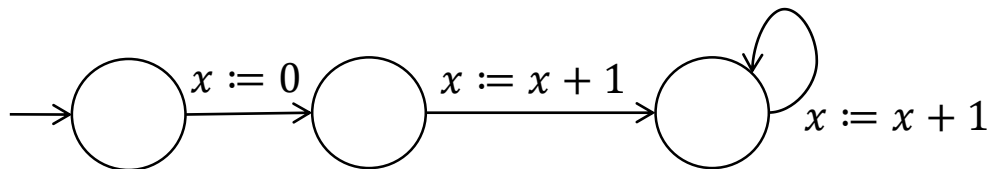
# Learn Your Program

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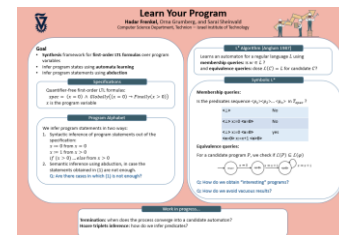
Goal: a **synthesis** framework  
for **first-order LTL** formulas

Spec:  $(x = 0) \wedge \text{Globally}((x = 0) \rightarrow \text{Finally}(x > 0))$

Program:



```
1: x := 0
2: x := x + 1
3: while (true)
4:   x := x + 1
```



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Goal: a synthesis framework  
for first-order LTL formulas

- Infer **program states**:  
symbolic automata learning
- Infer **program statements**:  
from spec & using abduction

The thumbnail shows a slide titled "Learn Your Program" by Hadar Frenkel, Orna Grumberg, and Sarai Sheinvald. It contains a "Goal" section with bullet points: "Synthesis framework for first-order LTL formulas", "Learn program states using symbolic automata learning", and "Learn program statements using abduction". It also includes a "Workshop agenda" with items like "Introduction to LTL", "Symbolic automata learning", and "Abduction". A diagram of a state transition system is visible at the bottom right of the slide.