CTL Model Checking of Manœuvre Automata
What is a manœuvre automaton?
What is model checking?

System Model

Model Checker

System Property

Property fulfilled?

Witness

Counter example
The main idea of this seminar

- Plan can be expressed as CTL formulæ
  
  $$E(\neg \text{obstacle} \ U \ \text{goal})$$

- MA can be interpreted as Transition Systems
  
  $$m_0 \rightarrow m_1 \quad \text{iff} \quad s_0 \rightarrow s_1$$

- Model checking returns either a witness or a counter example
The main idea of this seminar

- Plan can be expressed as CTL formulae
  \[ \mathbf{E}(\neg \text{obstacle U goal}) \]

- MA can be interpreted as Transition Systems
  \[ m_0 \rightarrow m_1 \quad \text{iff} \quad s_0 \rightarrow s_1 \]

- Model checking returns either a witness or a counter example

Model checking of Manoeuvre Automata
= Path Planning with Manoeuvre Automata
Are you suited for this topic?

if

- you know about model checking,
- you like theoretical computer science stuffs,
- you want to apply CS theory to robotics,
Are you suited for this topic?

if

- you know about model checking,
- you like theoretical computer science stuffs,
- you want to apply CS theory to robotics,

then

- feel free to contact me to discuss more!

end if