



**FCAI**

**fcai.fi**

# Today



How Does The "Model"?

# Background vs Decision-making Planning



# Time of Planning

# Decision-time Planning

- Find best action for current situation



# Background Planning

- Learn (from past data) how to act in any situation

**Continuous  
actions**

**Discrete  
actions**

**Simulate  
environment**

# Assist learning Algorithm

- **MCTS**

- ...

- iLQR
- CEM
- MPPI
- ...

- **DYNA**
- **Latent dynamics**
- **...**



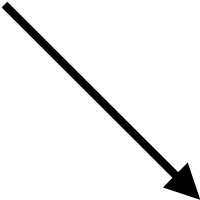
- Policy backprop

- ...



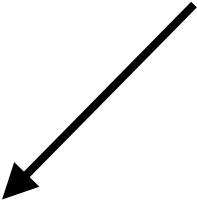




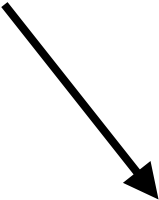










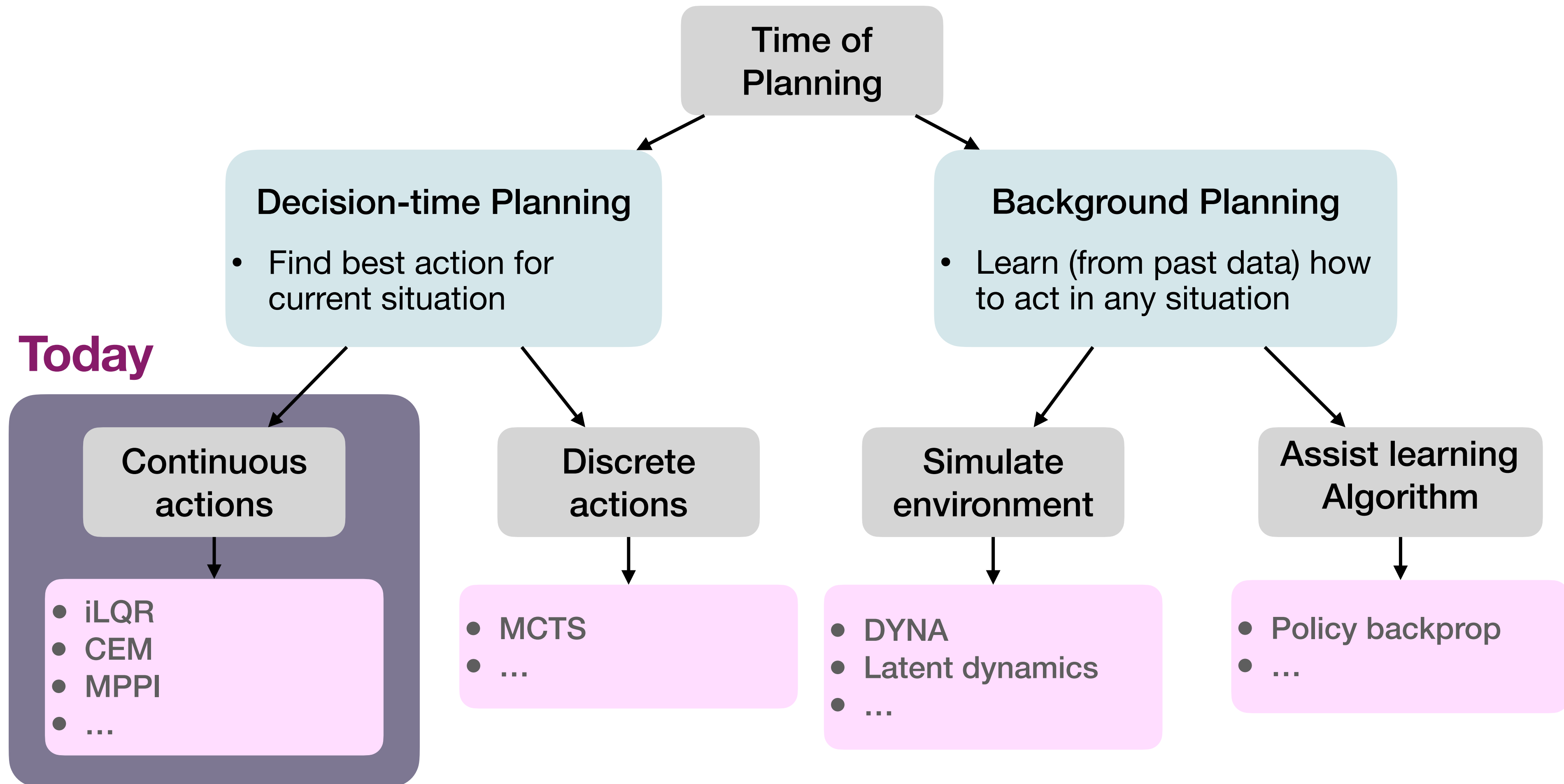






# How Do We Use The "Model"?

## Background vs Decision-time Planning



# Decision-time Planning (Continuous Actions)