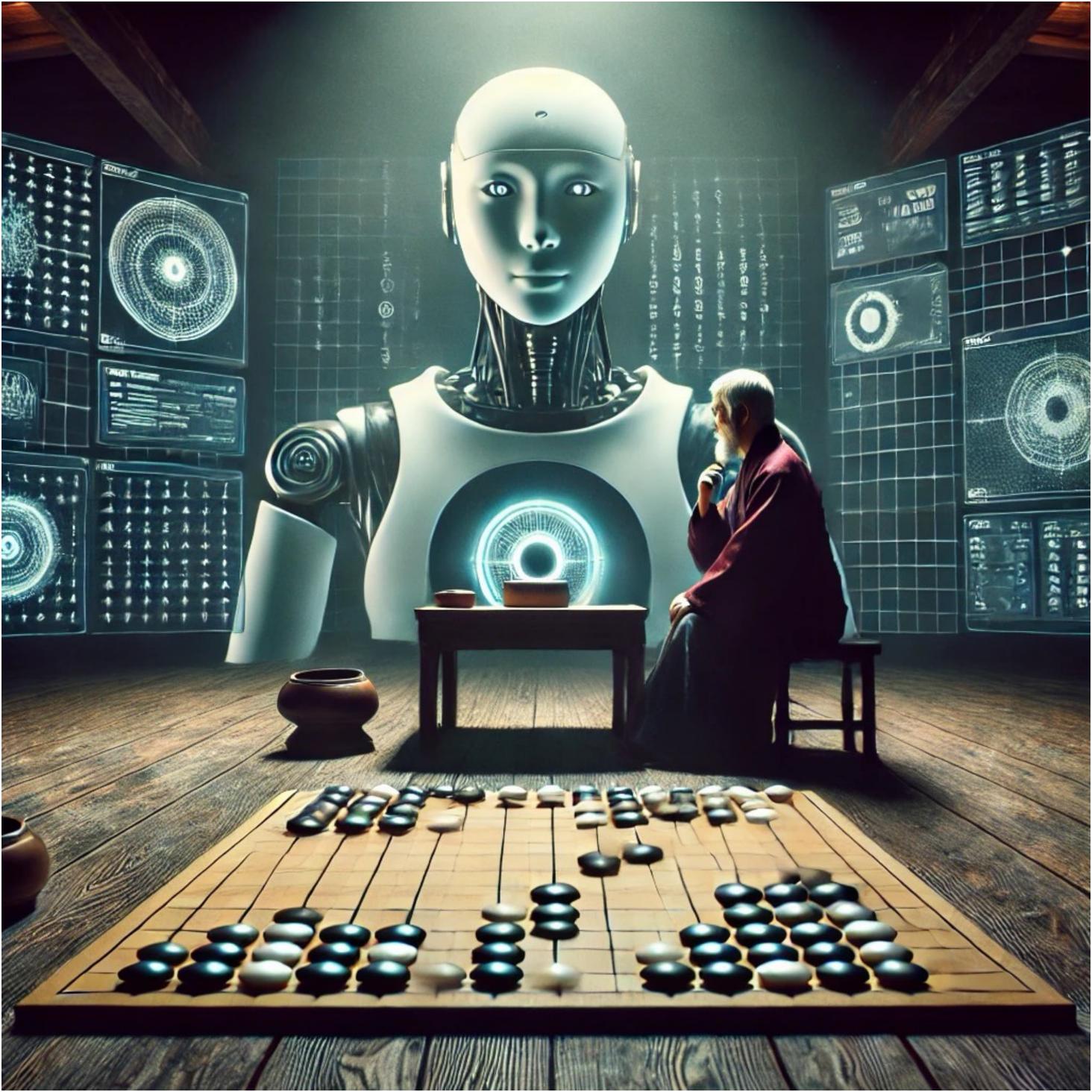
### FCAI fcai.fi



# AlphaGo

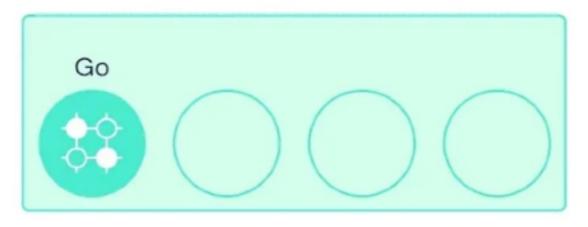
### Model-based reasoning for games

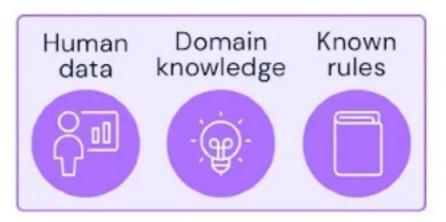
Silver et al. (2016). Mastering the game of Go with deep neural networks and tree search. Nature, 529(7587), 484.

#### **Domains**

#### Knowledge

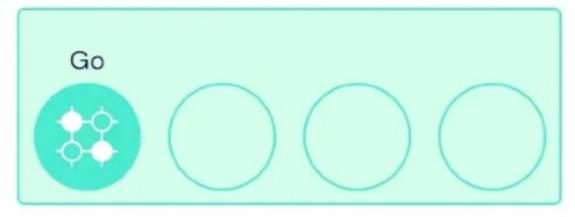






AlphaGo becomes the first program to master Go using neural networks and tree search (Jan 2016, Nature)

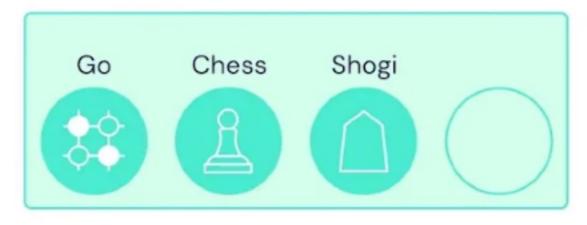






AlphaGo Zero learns to play completely on its own, without human knowledge (Oct 2017, Nature)







AlphaZero masters three perfect information games using a single algorithm for all games (Dec 2018, Science)







**MuZero** learns the rules of the game, allowing it to also master environments with unknown dynamics. (Dec 2020, Nature)

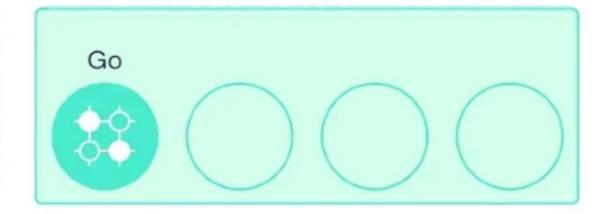
## AlphaGo

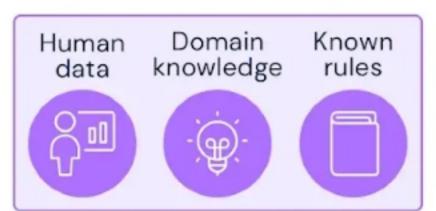
### Model-based reasoning for games

Silver et al. (2016). Mastering the game of Go with deep neural networks and tree search. Nature, 529(7587), 484.



#### **Domains**



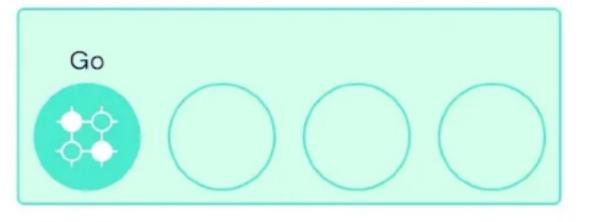


Knowledge

AlphaGo becomes the first program to master Go using neural networks and tree search (Jan 2016, Nature)



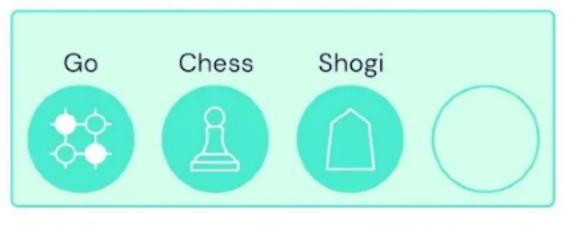
**AlphaGo** 





AlphaGo Zero learns to play completely on its own, without human knowledge (Oct 2017, Nature)

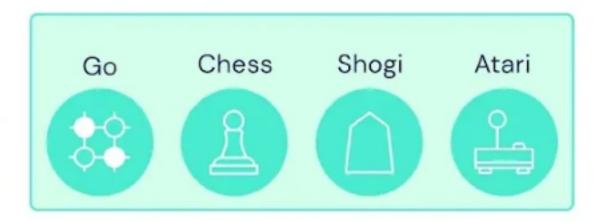






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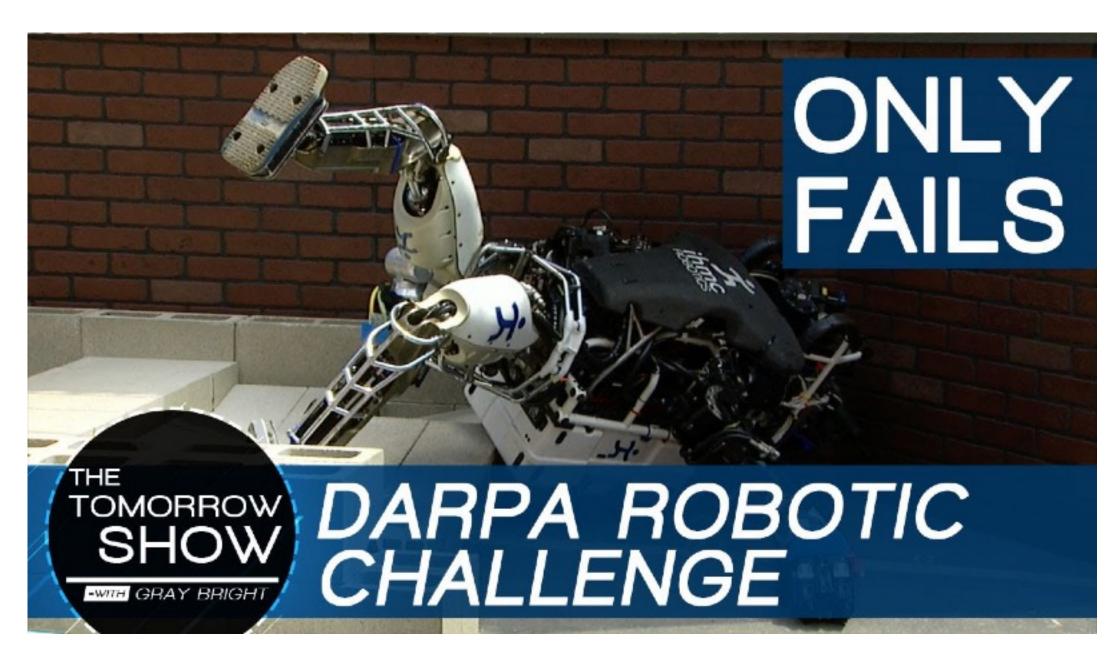




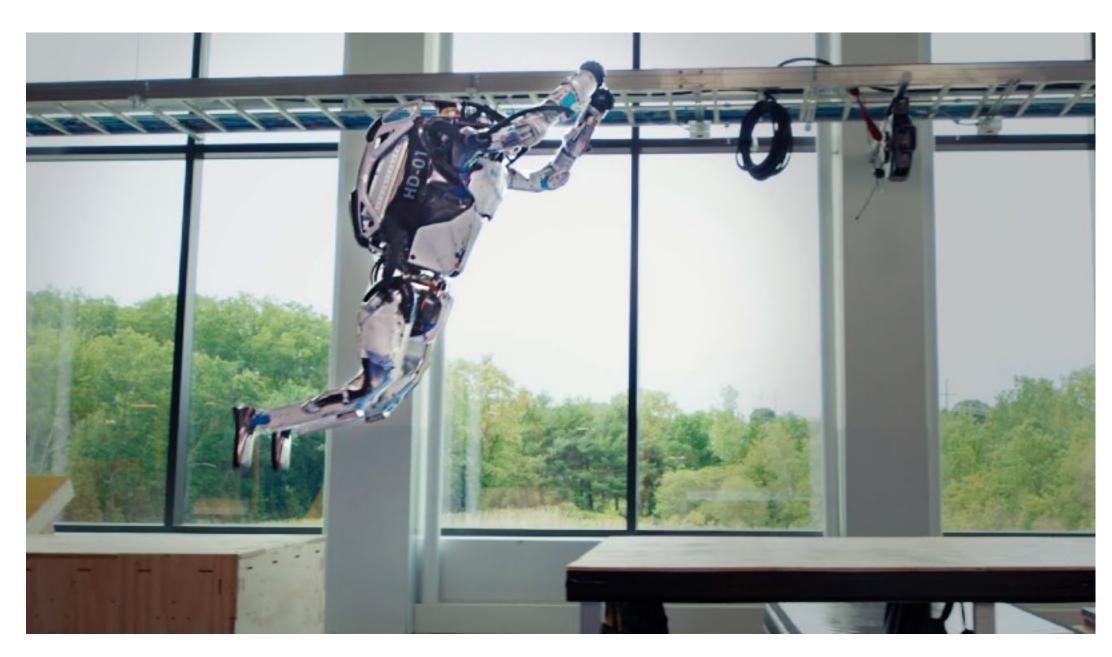


**MuZero** learns the rules of the game, allowing it to also master environments with unknown dynamics. (Dec 2020, Nature)

## Machine Learning for Robotics



DARPA Robotics Challenge 2015



Boston Dynamics Atlas - Partners in Parkour