

Spencer Rhoden

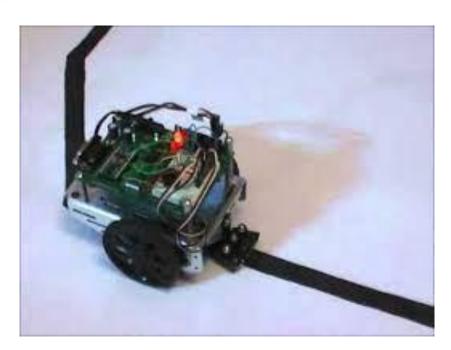
Agent

Anything that perceives its environment and takes action.



Agent Function

The action that the agent takes based on its perceived environment



Agent Program

This is the code behind telling the agent what action to take based on its perceived environment.

```
' Robotics with the Boe-Bot - RightServoTest.bs2
' Right servo turns clockwise there seconds, stops 1 second,
' then counterclockwise three seconds.
' {$STAMP BS2}
' {$PBASIC 2.5}
DEBUG "Program Running!"
               VAR
                              Word
counter
FOR counter = 1 TO 122
  PULSOUT 12, 650
  PAUSE 20
NEXT
FOR counter = 1 TO 40
  PULSOUT 12, 750
  PAUSE 20
NEXT
FOR counter = 1 TO 122
  PULSOUT 12, 850
  PAUSE 20
NEXT
END
```

Rationality

Reasonable action taken by the agent according to its environment and perceptions.



Autonomy

Agents that are able to accomplish their goal with little to no human interaction.



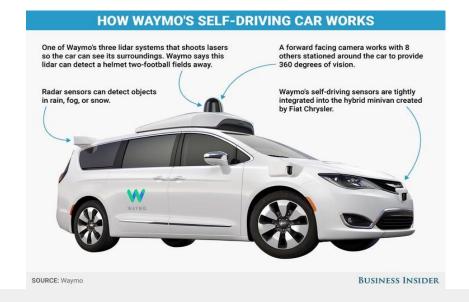
Reflex Agent

A type of agent that performs a role solely on its current environment.



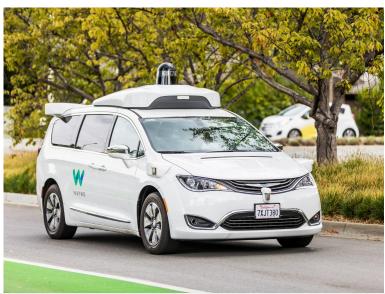
Model -Based Agent

A type of agent that performs a role based on previous experience with the environment and current perceptions of the environment.



Goal - Based Agent

A goal based agent is similar to a reflex agent, but it uses its perception and is capable of thinking ahead to achieve its goal.



Utility -Based Agent

A utility based agent takes the best possible action towards its goal with the resources it has



Learning Agent

A type of agent that is capable of learning from its previous experiences.

