# Path Planning

## Mobile Robotics

## Mechanical Control Systems

## **Position Estimation**

Google's DeepMind Al Just Taught Itself To Walk

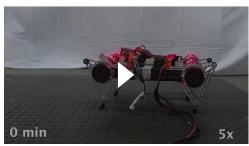


http://handbookofrobotics.org/view-chapter/videodetails/1

3D Printed Robot Cat learns to walk with Machine Learning (Genetic Algorithm)

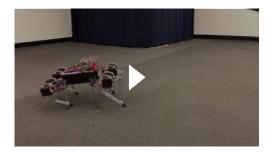


Learning to Walk via Deep Reinforcement Learning

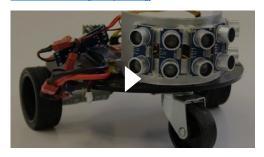


https://www.youtube.com/watch?v=IUZUr7jxoqM





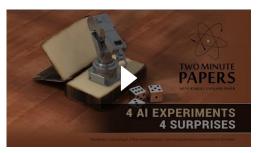
Autonomous Self-Learning Robot (Q-Learning)



Al Learns to Park - Deep Reinforcement Learning



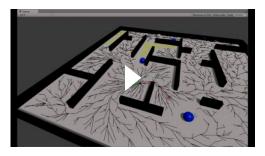
4 Experiments Where the Al Outsmarted Its Creators



A\* in Action - Artificial Intelligence for Robotics



https://www.youtube.com/watch?v=QLNSkFnBYuM



Meet the Robots at Amazon



Inside A Warehouse Where Thousands Of Robots Pack Groceries

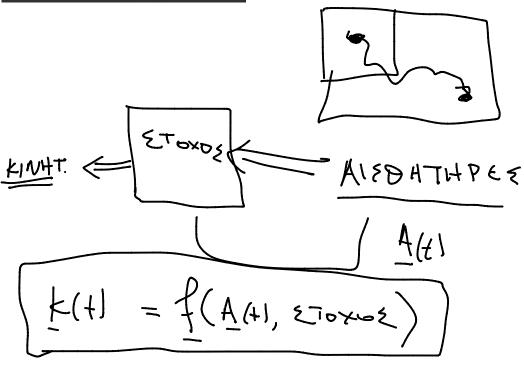


BMW Car Factory ROBOTS - Fast Manufacturing



A Comparsion of Pathfinding Algorithms





Στα πλαίσια της πρώτης διάλεξης του μαθήματος προβλήθηκαν βίντεο τα οποία άμεσα ή έμμεσα έχουν σχέση με τα επιστημονικά αντικείμενα που θα ασχοληθούμε στο μάθημα. Μπορείτε να τα δείτε στις ακόλουθες διευθύνσεις:

Meet the Robots at Amazon Inside A Warehouse Where Thousands Of Robots Pack Groceries BMW Car Factory ROBOTS - Fast Manufacturing

#### Google's DeepMind Al Just Taught Itself To Walk

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Learning to Walk via Deep Reinforcement Learning https://www.youtube.com/watch?v=lUZUr?jxoqM Autonomous Self-Learning Robot (Q-Learning)
Al Learns to Park - Deep Reinforcement Learning
4 Experiments Where the Al Outsmarted Its Creators
4\* in Action - Artificial Intelligence for Robotics
https://www.youtube.com/watch?v=QLNSkFnBYuM
A Comparsion of Pathfinding Algorithms

Επίσης μερικά video που δεν προλάβαμε να δούμε, κυρίως λόγω μεγέθους: https://www.youtube.com/watch?v=bBnhdj9lqFg

```
Hello before fork

Process: 5997 -> GlobI = 3

Process: 5997 -> LocI = 3

Final Results Process: 5997 -> GlobI = 3 , LocI= -13

Process: 0 -> GlobI = 23

Process: 0 -> LocI = 23

Final Results Process: 0 -> GlobI = 23 , LocI= 7
```