

Introduction to Artificial Intelligence

English practicals 1

Marika Ivanová

Department of Theoretical Computer Science and Mathematical Logic (KTIML)
Faculty of Mathematics and Physics

February 15th 2022

Contact information

web

<http://ktiml.mff.cuni.cz/~ivanova>

email

ivanova@ktiml.mff.cuni.cz

Platforms for remote classes

- Zoom: English practicals
- ReCodEx - assignment description, submission, automatic testing
- git - assignment templates

Assignments

- Obtain git repository:
- `git clone git@gitlab.mff.cuni.cz:finkj1am/introai.git`
- `git pull` regularly

Assignments

- Obtain git repository:
- `git clone git@gitlab.mff.cuni.cz:finkj1am/introai.git`
- `git pull` regularly
- Implement in Python on your machine, use unit tests from git
- Once you are satisfied, submit your solution to ReCodEx
- If you are new to ReCodEx, you can try submitting the first template (`heuristics.py`)
- Collaboration among students is encouraged, but everyone should submit their own solution

Credit requirements

- At least 70 points in ReCodEx
- Individual approach for those who attend group sessions regularly

Related courses

- Artificial Intelligence I and II
- Data Mining
- Neural Networks
- Machine Learning
- Large Scale Optimization

Thesis supervision

I offer supervision of individual SW projects, bachelor and master theses

Thesis supervision

I offer supervision of individual SW projects, bachelor and master theses

- Multi-Agent Path Finding - classic, adversarial/selfish agents

Thesis supervision

I offer supervision of individual SW projects, bachelor and master theses

- Multi-Agent Path Finding - classic, adversarial/selfish agents
- Optimization - design of ad-hoc wireless networks, wireless sensor networks,...

Thesis supervision

I offer supervision of individual SW projects, bachelor and master theses

- Multi-Agent Path Finding - classic, adversarial/selfish agents
- Optimization - design of ad-hoc wireless networks, wireless sensor networks,...
- Open to your own topic

Discussion

- What is AI?
- Examples of applications of AI
- What are your expectations from the course?

Discussion

- What is AI?
- Examples of applications of AI
- What are your expectations from the course?

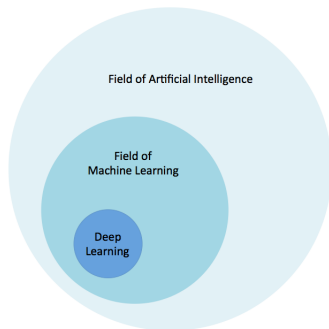


Figure: credit:
www.algorithmia.com

Applications of AI

AI is almost everywhere today, the classic areas are:

- Speech recognition (dictation SW, voice-driven phone answering menu)
- Natural language processing (chatbots, Siri, mood detection)
- Computer vision (identify objects within images, diagnostics, face recognition,...)
- Recommender systems (additional purchases)
- Ride/car-share services (minimize waiting time, reliable ETA)
- Household robots (vacuuming-identify and avoid obstacles, efficient route)
- Autopilot technology
- Video game industry

General questions

- What can humans still do better than computers?

General questions

- What can humans still do better than computers?
Social interaction, dealing with unexpected situations, learning...

General questions

- What can humans still do better than computers?
Social interaction, dealing with unexpected situations, learning...
- What are common misconceptions about AI?

General questions

- What can humans still do better than computers?
Social interaction, dealing with unexpected situations, learning...
- What are common misconceptions about AI?
Like human brain, taking jobs, learning on their own,...

General questions

- What can humans still do better than computers?
Social interaction, dealing with unexpected situations, learning...
- What are common misconceptions about AI?
Like human brain, taking jobs, learning on their own,...
- Ethical issues in AI

General questions

- **What can humans still do better than computers?**
Social interaction, dealing with unexpected situations, learning...
- **What are common misconceptions about AI?**
Like human brain, taking jobs, learning on their own,...
- **Ethical issues in AI**
biases, decisions of autonomous vehicles, Big Brother

Trolley problem

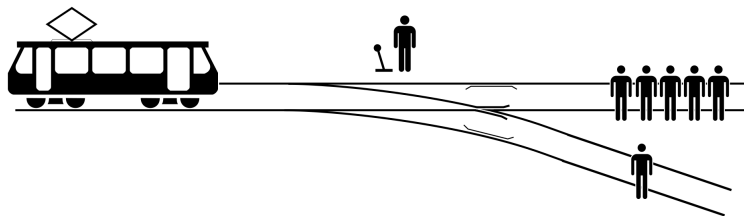
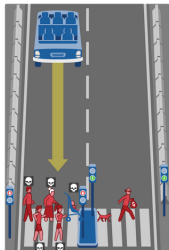


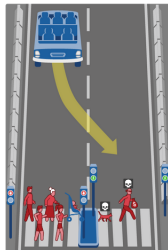
Figure: credit: www.wikipedia.org

Cat and burglar

Share Link 1 Like Random



Show Description



Show Description

