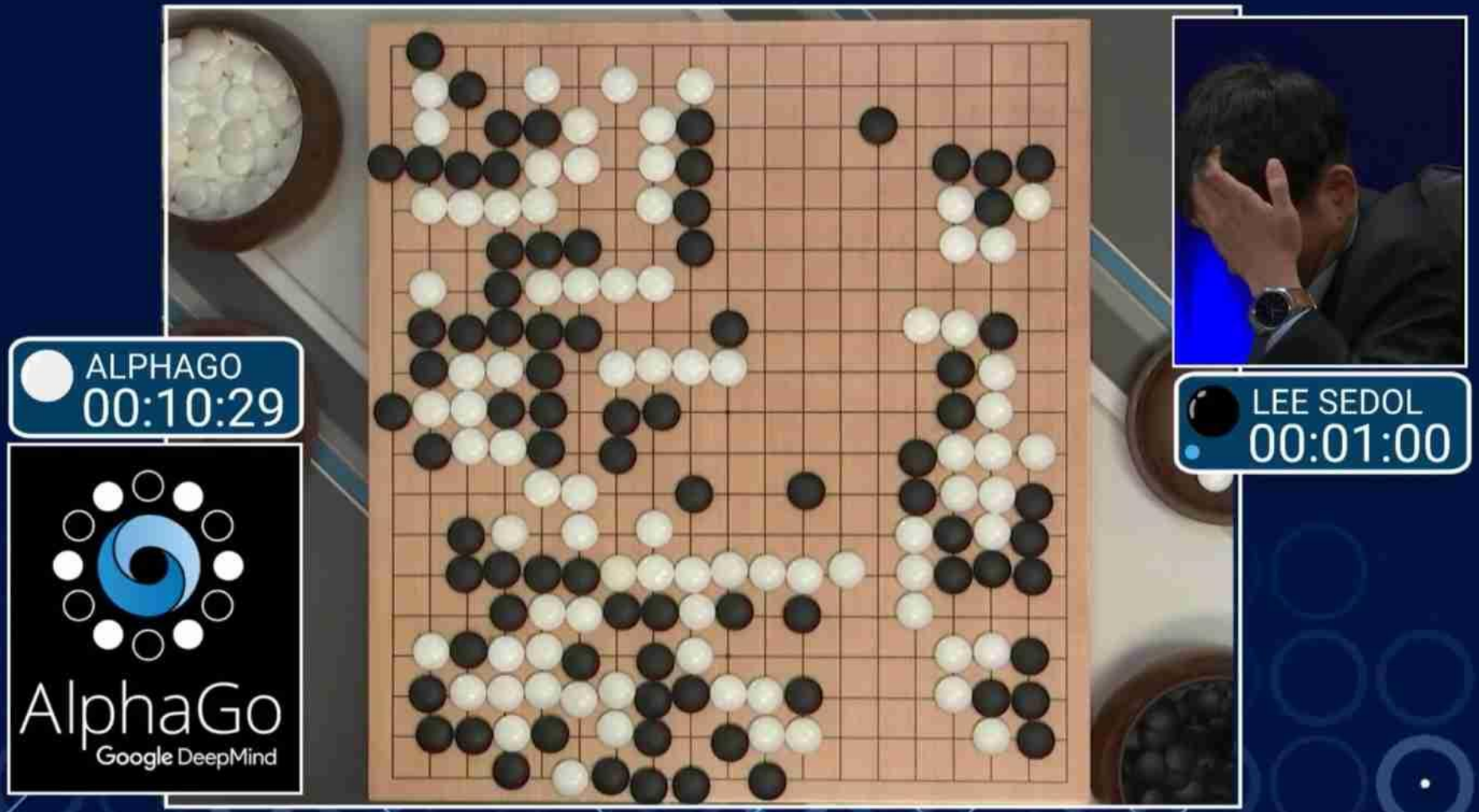
Reinforcement Learning

The Real Artificial Intelligence

Machine Learning

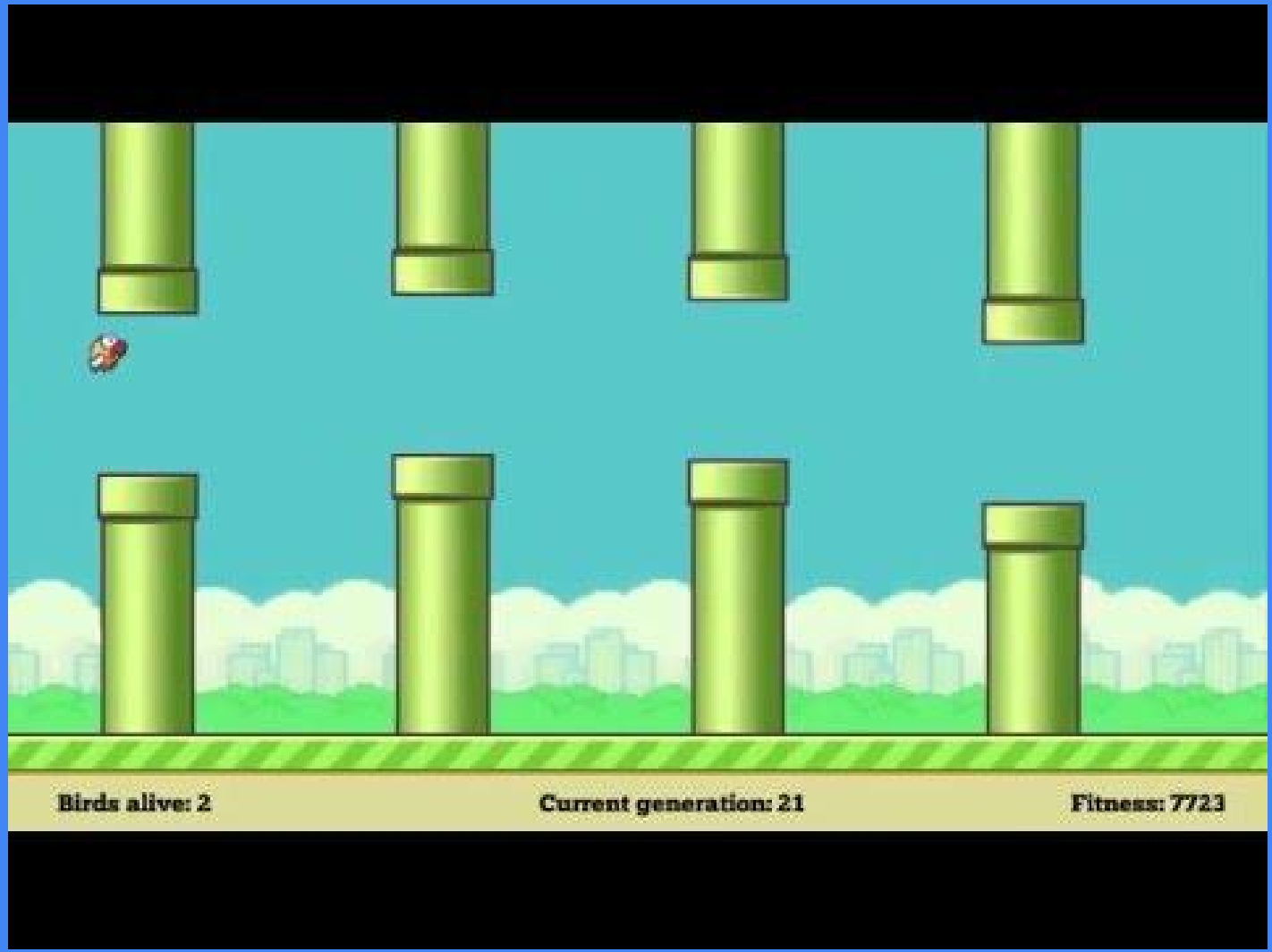
- Supervised Learning
- Unsupervised Learning
- Reinforcement Learning

What is Reinforcement Learning?


ALPHAGO
00:10:29
AlphaGo
Google DeepMind
LEE SEDOL
00:01:00

Flappy Bird

Wait for it.


Birds alive: 2
Current generation: 21
Fitness: 7723

Course Coverage

- Python and its libraries.
- Game Theory and Q-Tables.
- Markov Decision Process and Bellman Equations.
- Model Free Learning.
- Deep-Q Nets.
- Conquering PacMan and other applications.

Pre-requisites

- Python Basics.
- Matrix Multiplication and some elements of Linear Algebra.
- Machine Learning not needed but recommended.

Course Instructors

1. **Preetham Reddy**: EEE, Association Coordinator.
2. **Sahith Dambekodi**: EEE, GSoC 2017 with CMUSphinx.
3. **Sebastin Santy**: EnI, GSoC 2017 with Mozilla.
4. **Wazeer Zulfikar**: CS, GSoC 2017 with R Project in Statistical Computing.

Evaluation Scheme

Won’t be following Midsem structure.

Evaluation Scheme

Component	Weightage (%)	Tentative Date	Remarks
Assignment - I	20	Early September	Open Book
Assignment - II	20	Post Mid-Semester Exams	Open Book
Quizzes	20	Throughout Course	Closed Book
Project	40	Before Compre	Open Book

Thanks!

Check out the handout at

https://goo.gl/rPiBeS