**Structura documentatie licenta**

1 Introducere

- motivatie

- comportament

2 Aplicatii similare

* intro why ml in videogames-
* DeepLearning-
  + AlphaGo & AlphaGoZero-
  + Starcraft: Alphastar-
  + dota2: open AI-
* Computer vision-based -
  + Pong-
  + Doom-
* Procedural content generation -
  + Galactic Arms Race-

3 Implementare

* Unity short intro
* Adversary AI
  + K-means clustering algorithm
    - Point saving/loading
    - Clusterising
    - NavGoal
  + A star algorithm;
    - Building the graph as is searches
    - Cheching for walls
    - Stoping condition
* Movement
  + Player imput
  + Get new coordonates
* Collision
  + Wall/player/adversary detection
* Tilemap
* Sprites

4 Concluzie

* Machine learning help create better AI for competitive players
* Adaptive difficulty for different players
* Future goals
  + Extend to multiple AI agents working together