



STAGE RECHERCHE

Réunion du 02/08/2024

Stagiaire: Guy MBOSSO MBOSSO

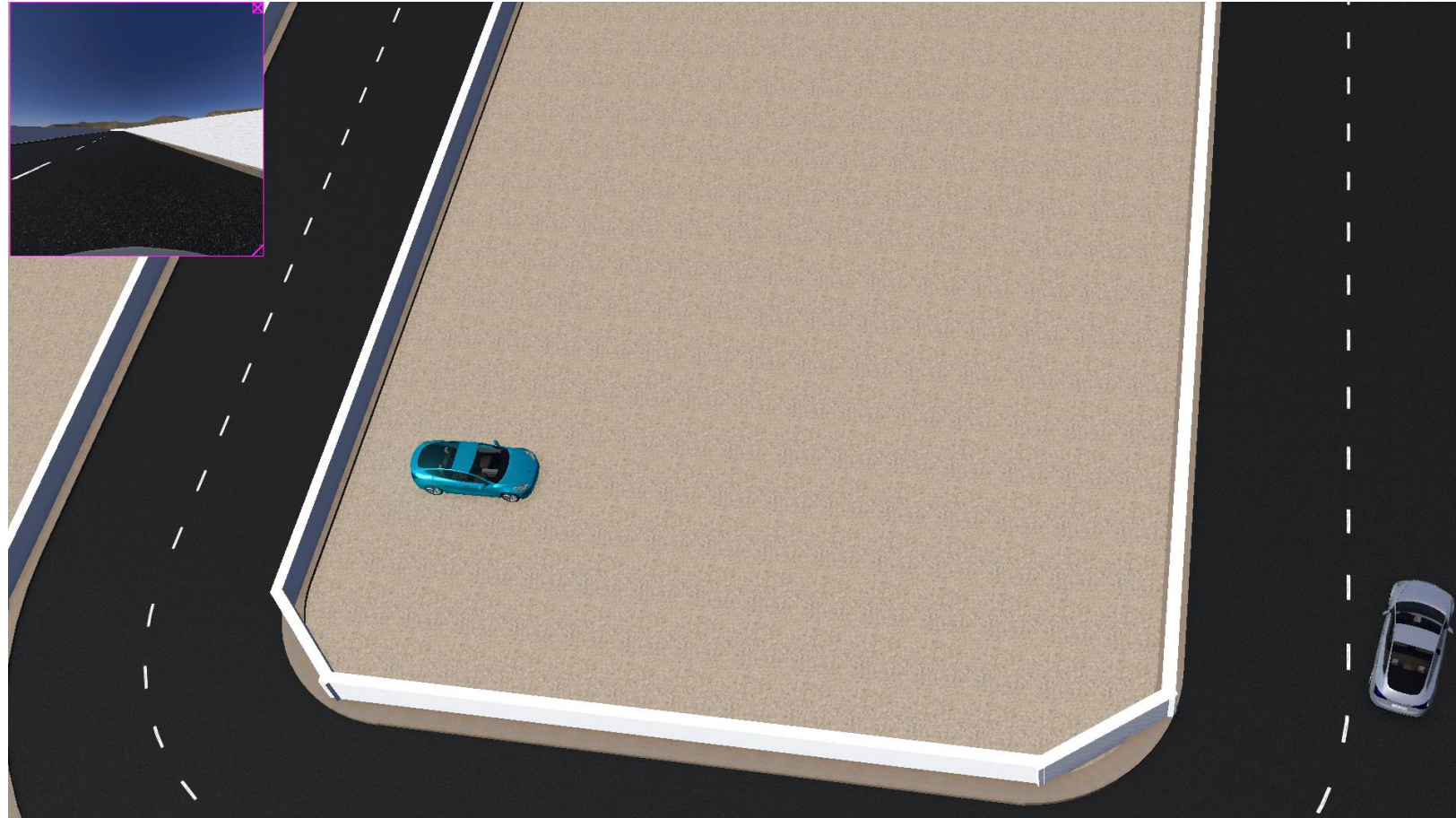
Encadrant: Jae Yun JUN KIM

Teste du premier model

- Récompense croissante

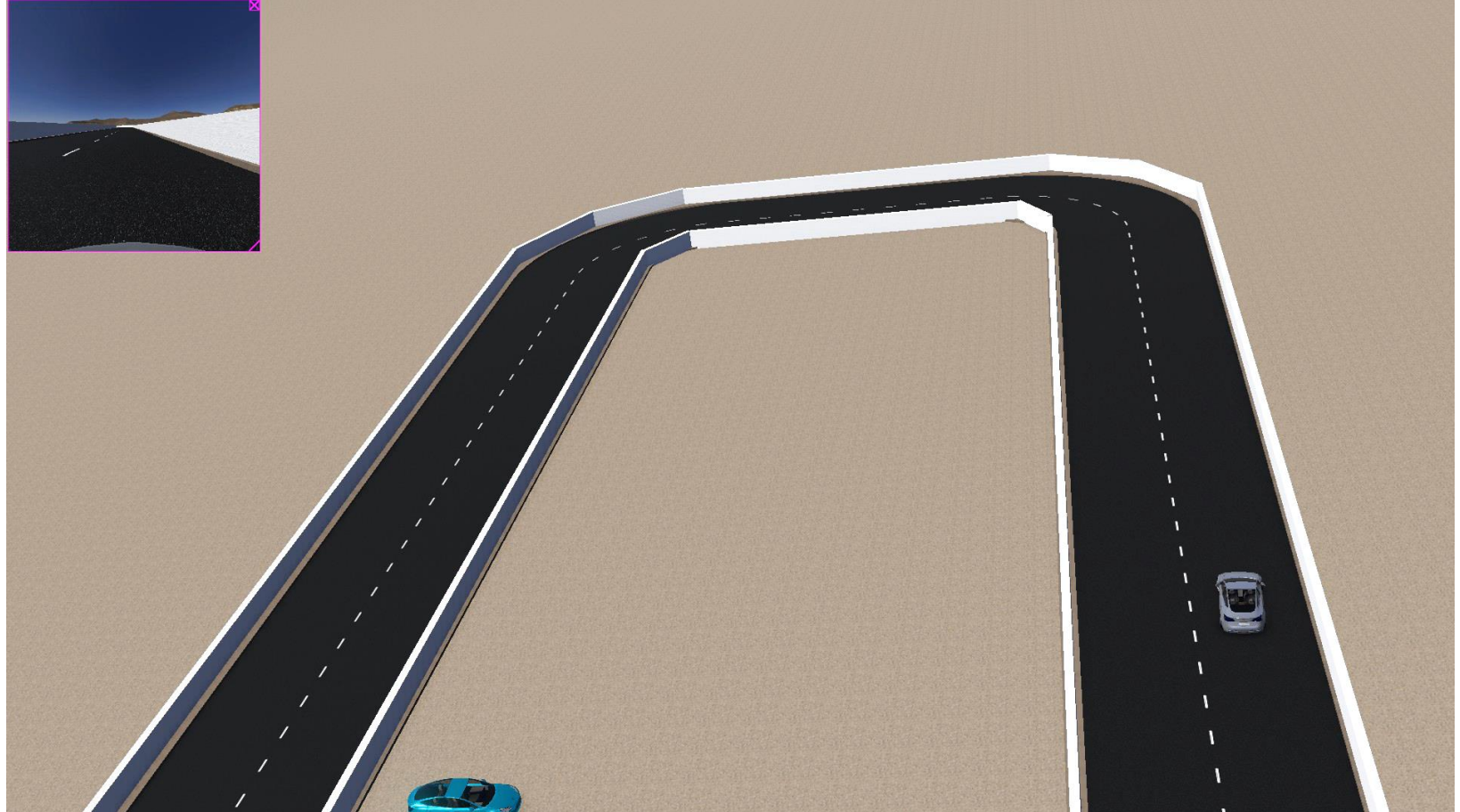
Console - All

```
EP: 209, Total Steps: 55444, EP Score: 175.0999999999798, Avg score: 143.5649999999988; Updated Epsilon: 0.34901730169741024
EP: 210, Total Steps: 55856, EP Score: 187.6999999999777, Avg score: 145.60199999999878; Updated Epsilon: 0.3472722151889232
EP: 211, Total Steps: 56102, EP Score: 71.4999999999966, Avg score: 145.85399999999876; Updated Epsilon: 0.3455358541129786
EP: 212, Total Steps: 56485, EP Score: 167.3999999999981, Avg score: 145.62999999999877; Updated Epsilon: 0.3428081748424137
EP: 213, Total Steps: 57464, EP Score: 584.6000000000054, Avg score: 150.90799999999882; Updated Epsilon: 0.3420891339682016
EP: 214, Total Steps: 58456, EP Score: 593.7000000000006, Avg score: 157.4249999999989; Updated Epsilon: 0.3403786882983606
EP: 215, Total Steps: 58868, EP Score: 187.6999999999777, Avg score: 159.20299999999887; Updated Epsilon: 0.3386767948568688
EP: 216, Total Steps: 59244, EP Score: 162.4999999999818, Avg score: 161.06499999999886; Updated Epsilon: 0.33698341088258443
EP: 217, Total Steps: 59372, EP Score: -11.09999999999795, Avg score: 161.37999999999886; Updated Epsilon: 0.3352984938281715
EP: 218, Total Steps: 59933, EP Score: 291.999999999961, Avg score: 164.3969999999988; Updated Epsilon: 0.33362200135903064
EP: 219, Total Steps: 60356, EP Score: 195.3999999999765, Avg score: 166.12599999999878; Updated Epsilon: 0.33195389135223546
EP: 220, Total Steps: 60551, EP Score: 35.80000000000024, Avg score: 166.34299999999877; Updated Epsilon: 0.3302941218954743
EP: 221, Total Steps: 61353, EP Score: 460.699999999973, Avg score: 169.25499999999877; Updated Epsilon: 0.32864265128599696
EP: 222, Total Steps: 61752, EP Score: 178.5999999999792, Avg score: 170.84399999999874; Updated Epsilon: 0.326999438029567
EP: 223, Total Steps: 62780, EP Score: 618.9000000000076, Avg score: 175.72299999999888; Updated Epsilon: 0.3253644408394192
EP: 224, Total Steps: 63210, EP Score: 200.2999999999757, Avg score: 177.47299999999888; Updated Epsilon: 0.3237376186352221
EP: 225, Total Steps: 63641, EP Score: 200.9999999999756, Avg score: 178.2569999999988; Updated Epsilon: 0.322118930542046
EP: 226, Total Steps: 64063, EP Score: 194.6999999999766, Avg score: 179.67099999999874; Updated Epsilon: 0.3205083588933575
EP: 227, Total Steps: 65215, EP Score: 705.7000000000132, Avg score: 185.19399999999894; Updated Epsilon: 0.31890579420988907
EP: 228, Total Steps: 65867, EP Score: 355.6999999999504, Avg score: 188.6029999999988; Updated Epsilon: 0.3173112652388396
EP: 229, Total Steps: 66499, EP Score: 341.6999999999527, Avg score: 192.37599999999875; Updated Epsilon: 0.3157247089126454
```



Teste du 2nd model

- Fonction de récompense avec des points négatifs si la voiture s'approche des murs



Autre solution

- Utiliser DQN pour la prise de décision haut niveau tel que le changement ou la conservation d'une voie

