# Test done 2025_06_26 at 10_44_25

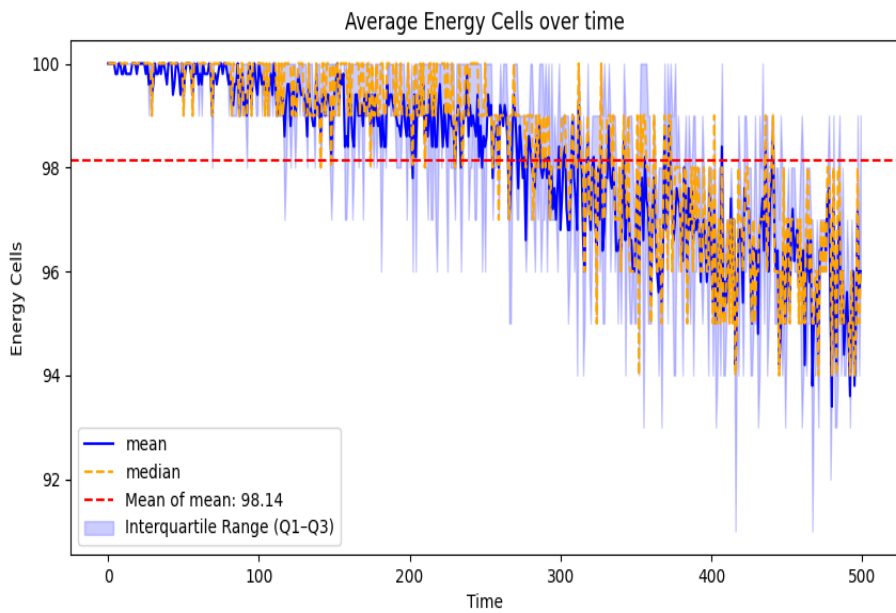Number of simulation done : 5. The window time of the simulation is 10

Initial condition
Size : 100
I_Energy : 120
I_Age : 100
I_Maturity : 20
I_Distr : Behaviors Corners
Radius : 6
Active : 100
C_Min : 15
C_Max : 150
C_Regen : 5
C_Distr : Uniform
Height : 60
Width : 60
P_Distr : Uniform
Move : 1
Eat : 2
Rest : 0
Reproduce : 5
N_Simulations : 5
Seed : 100
Energy Needed : 0.6
Extra Energy : 0.2
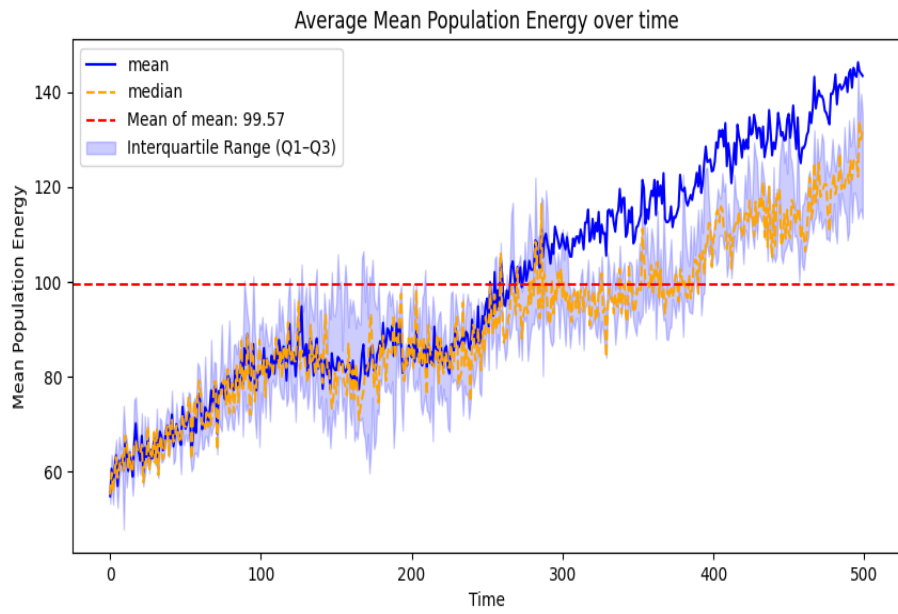Energy Requeste : 0.5
Mutation Rate : 0.1
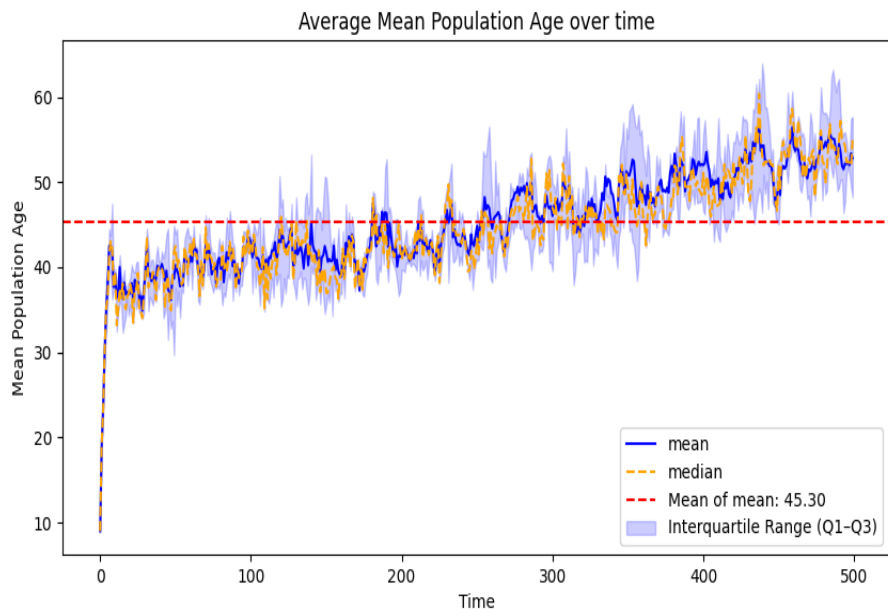

Mean : 5001.0
Variance : 0.0

Average Population over time
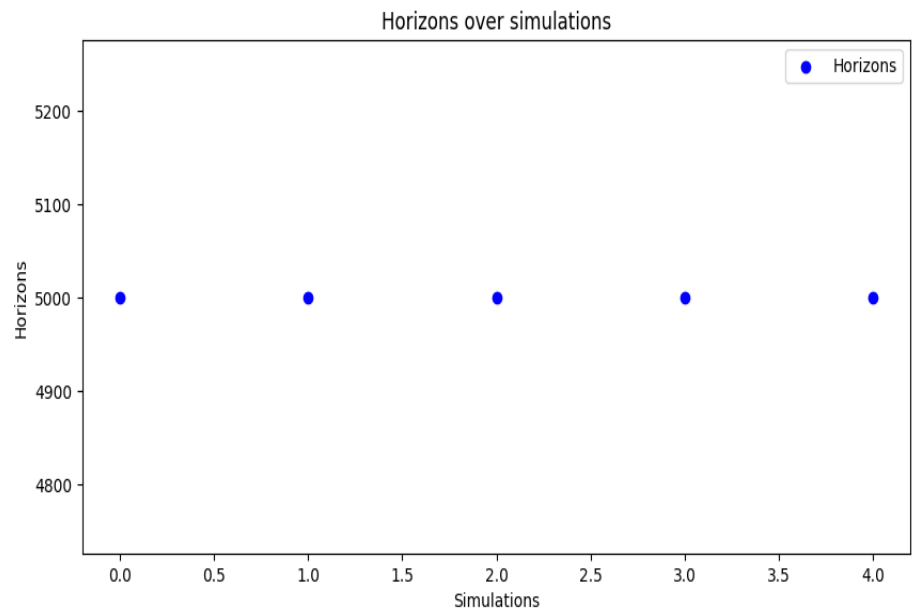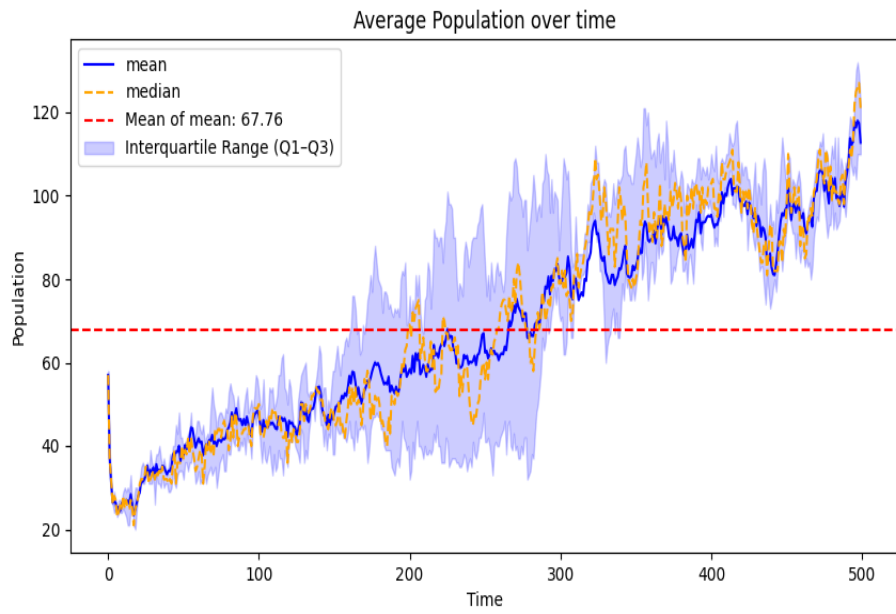
Mean : 67.7596
Variance : 539.8390878399999

Average Energy Cells over time

Mean : 98.1432
Variance : 2.3646137599999992

Average Mean Population Energy over time

Mean : 99.56658386592375
Variance : 542.4969080862604

Average Mean Population Age over time

Mean : 45.29527335113198
Variance : 31.020879041616894

Average Mean World Energy over time
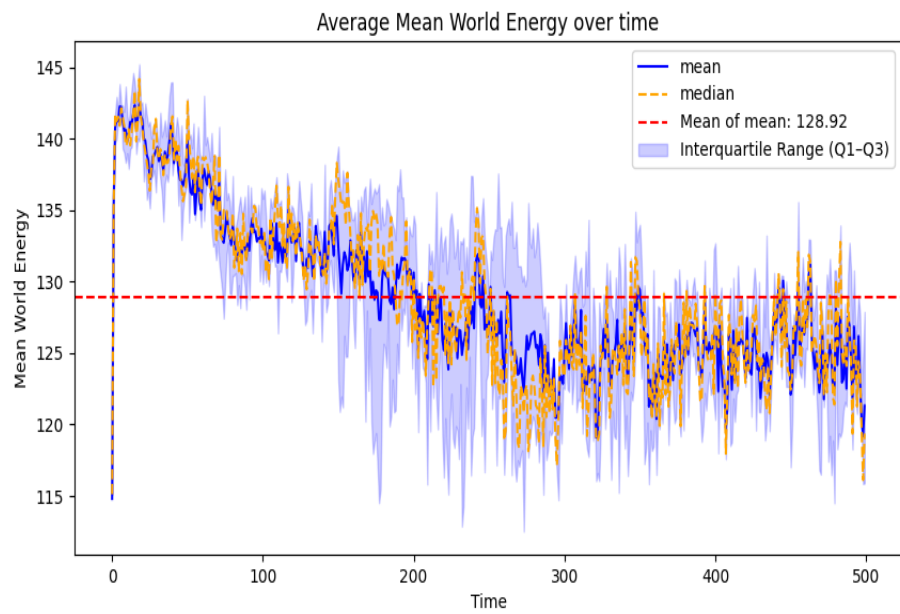
Mean : 128.923323910079
Variance : 27.964238313567634

Average Different Heritage over time
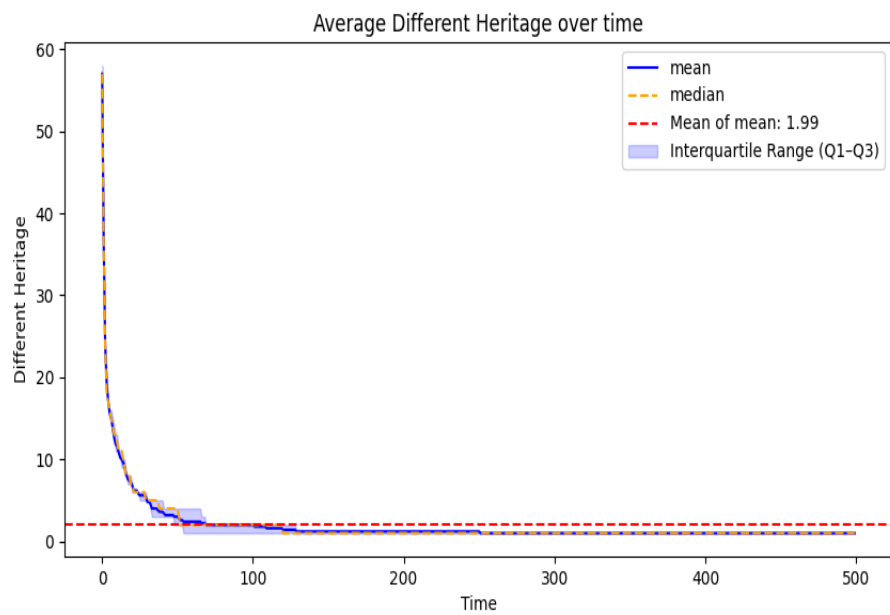
Mean : 1.9948
Variance : 14.06933296

Average Selfishness over time
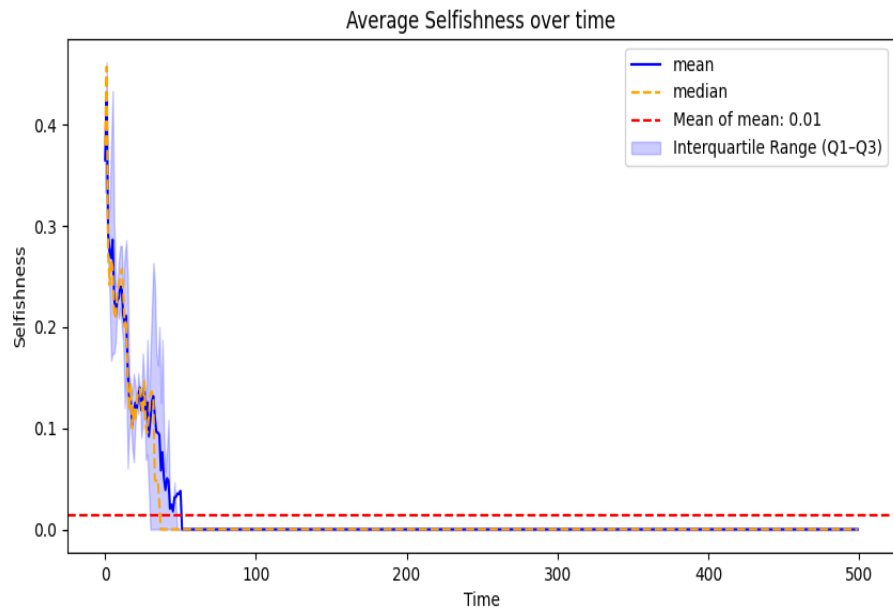
Mean : 0.014207353372056737
Variance : 0.002647630614072906

Average Altruism over time
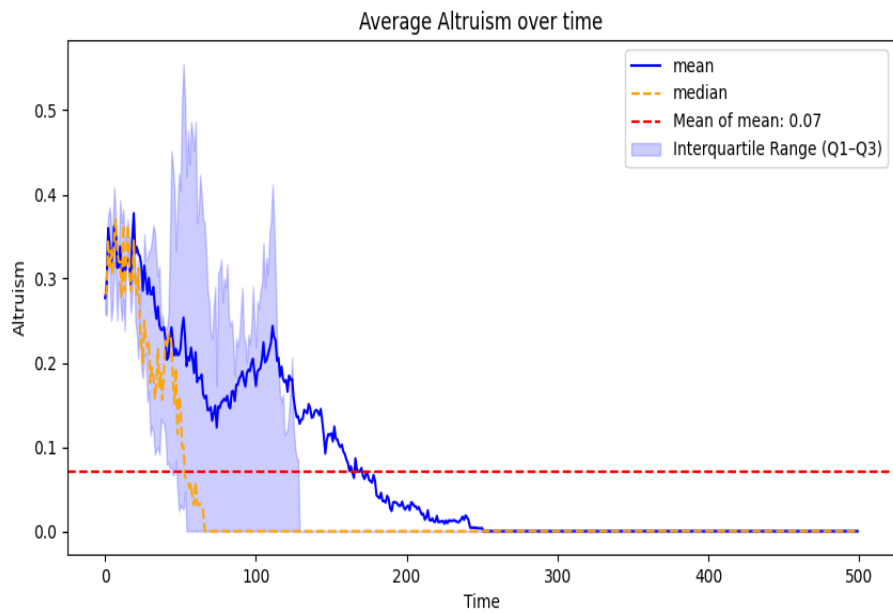
Mean : 0.07093622784011873
Variance : 0.010107982975634559

Average Normality over time
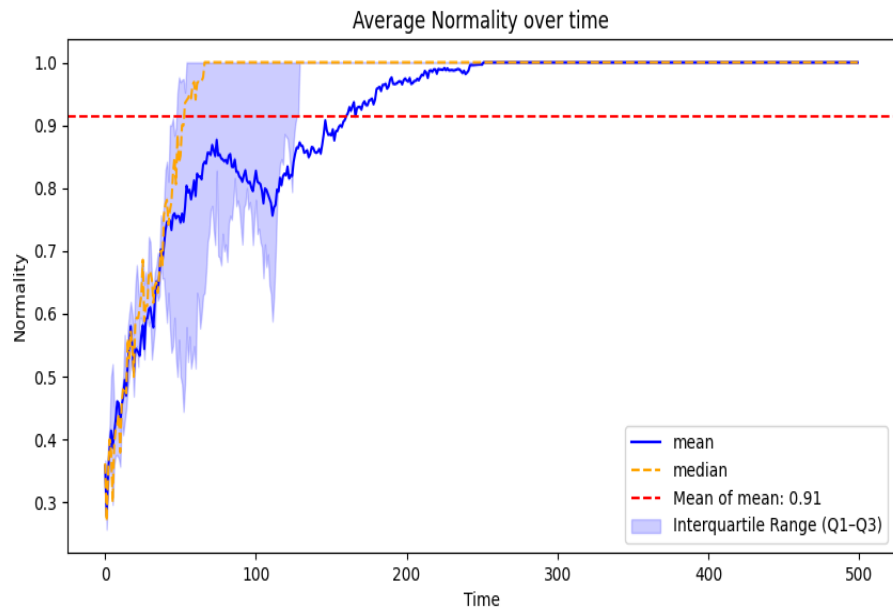
Mean : 0.9148564187878245
Variance : 0.019470032202726945
Spatial Distribution Density Heatmap

Time = 0.0

Time = 0.25

Time = 0.5

Time = 0.75

Time = 1.0

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This Project is done for the academic purpose of implementing the practical part of the Degree Thesis in Artificial Intelligence and Data Analytics.