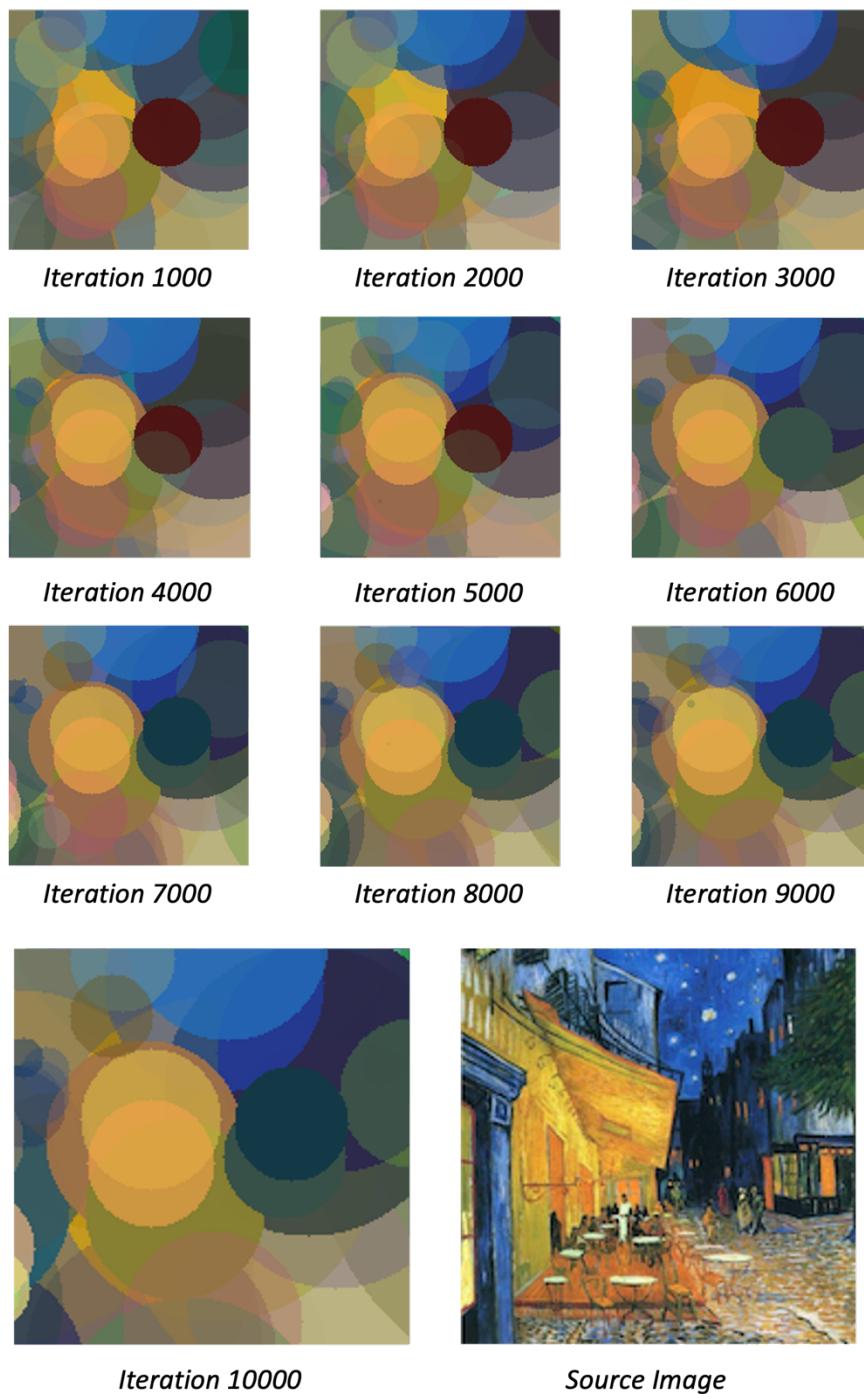


## **Tournament size is set to 8**

*Other parameters are set to their default values*



*Best fitness after 10000 generations:  
**-144468450.0***

FIGURE 33. RESULTS WHEN TOURNAMENT SIZE IS SET TO 8.

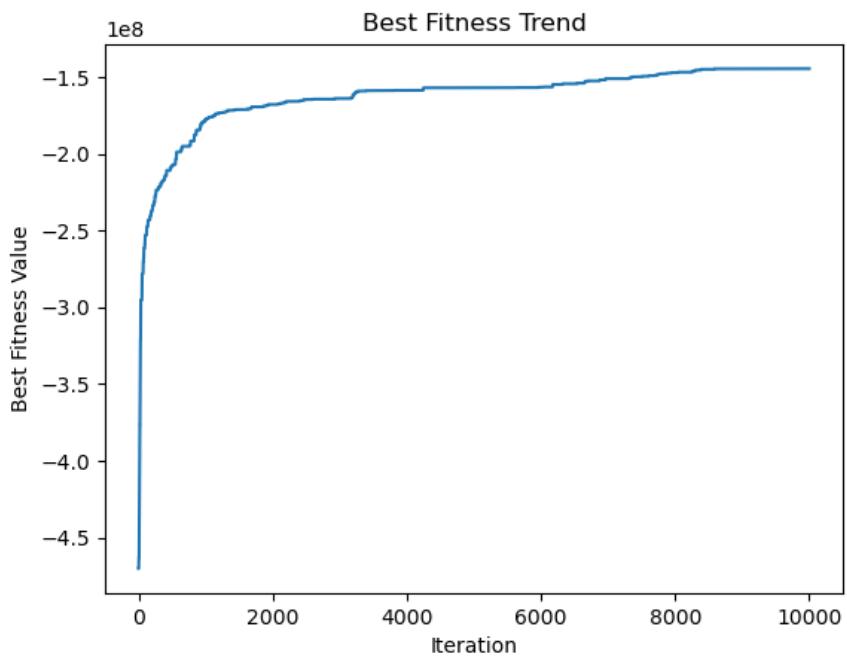


FIGURE 34. FITNESS PLOT FROM GENERATION 1 TO 10000,  
WHEN TOURNAMENT SIZE IS SET TO 8.

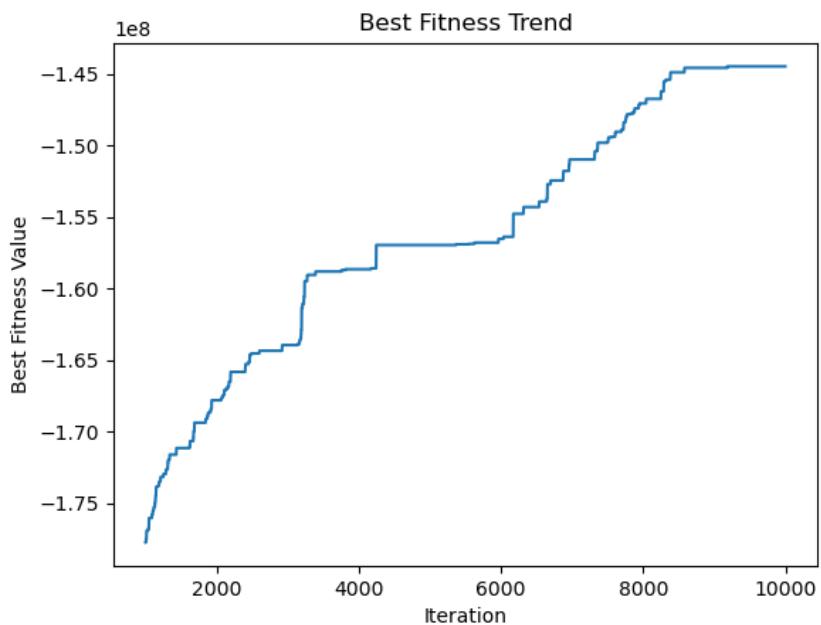


FIGURE 35. FITNESS PLOT FROM GENERATION 1000 TO 10000,  
WHEN TOURNAMENT SIZE IS SET TO 8.

## **Tournament size is set to 16**

*Other parameters are set to their default values*



*Iteration 1000*



*Iteration 2000*



*Iteration 3000*



*Iteration 4000*



*Iteration 5000*



*Iteration 6000*



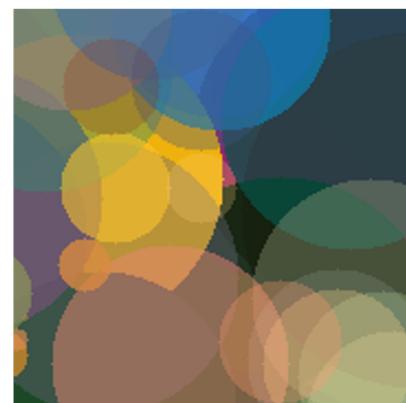
*Iteration 7000*



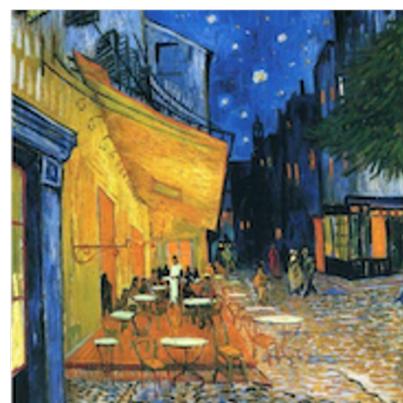
*Iteration 8000*



*Iteration 9000*



*Iteration 10000*



*Source Image*

*Best fitness after 10000 generations:  
**-145802820.0***

FIGURE 36. RESULTS WHEN TOURNAMENT SIZE IS SET TO 16.

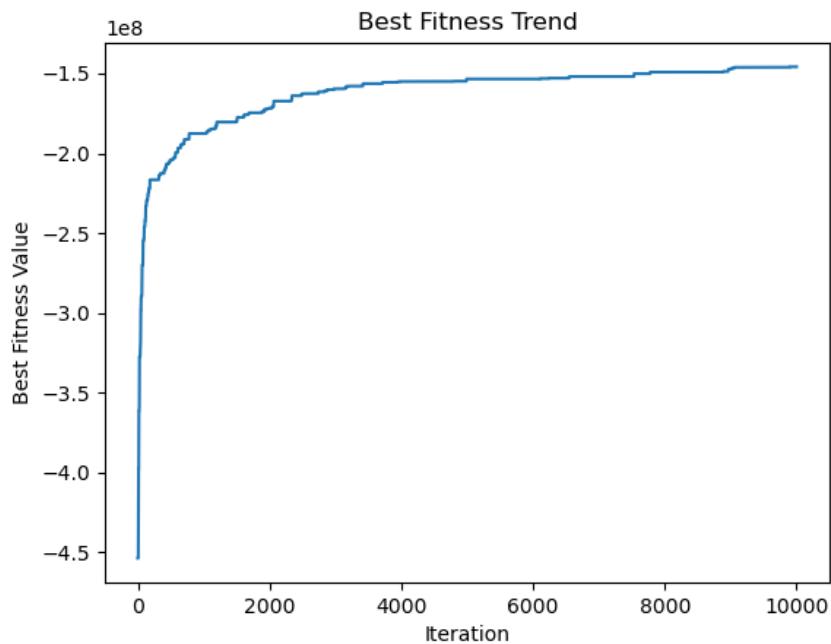


FIGURE 37. FITNESS PLOT FROM GENERATION 1 TO 10000,  
WHEN TOURNAMENT SIZE IS SET TO 16.

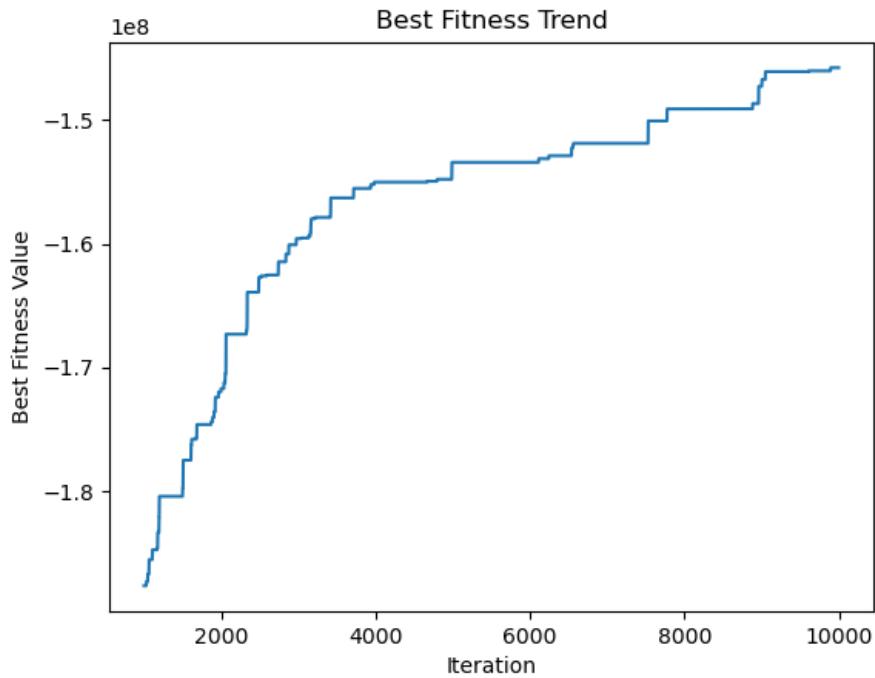
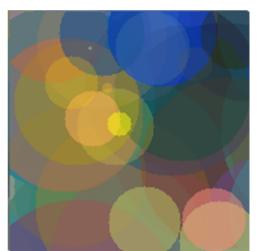


FIGURE 38. FITNESS PLOT FROM GENERATION 1000 TO 10000,  
WHEN TOURNAMENT SIZE IS SET TO 16.

## **Fraction of elites is set to 0.04**

*Other parameters are set to their default values*



*Iteration 1000*



*Iteration 2000*



*Iteration 3000*



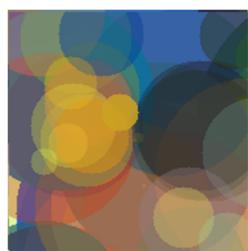
*Iteration 4000*



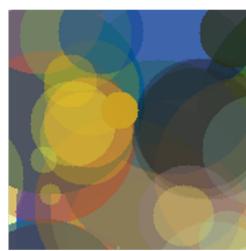
*Iteration 5000*



*Iteration 6000*



*Iteration 7000*



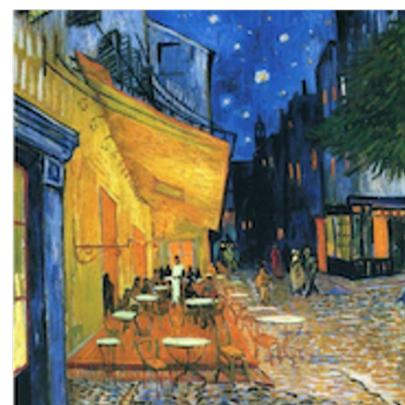
*Iteration 8000*



*Iteration 9000*



*Iteration 10000*



*Source Image*

*Best fitness after 10000 generations:  
**-145365260.0***

FIGURE 39. RESULTS WHEN FRACTION OF ELITES IS SET TO 0.04.

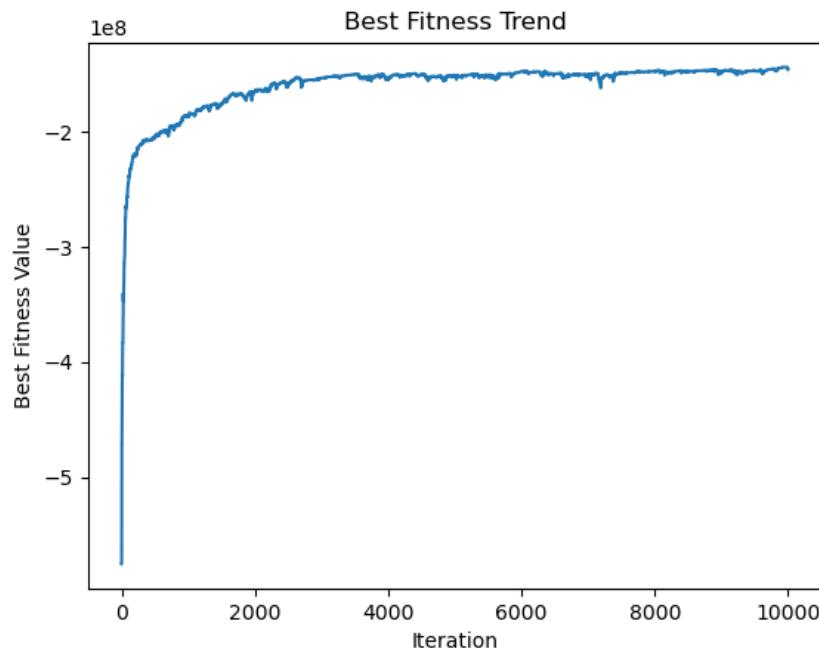


FIGURE 40. FITNESS PLOT FROM GENERATION 1 TO 10000,  
WHEN FRACTION OF ELITES IS SET TO 0.04.

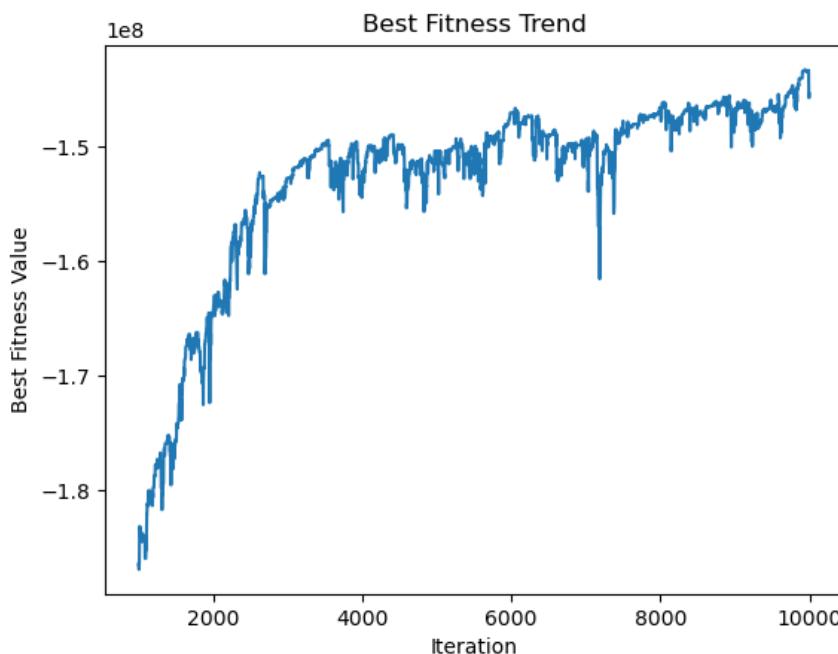
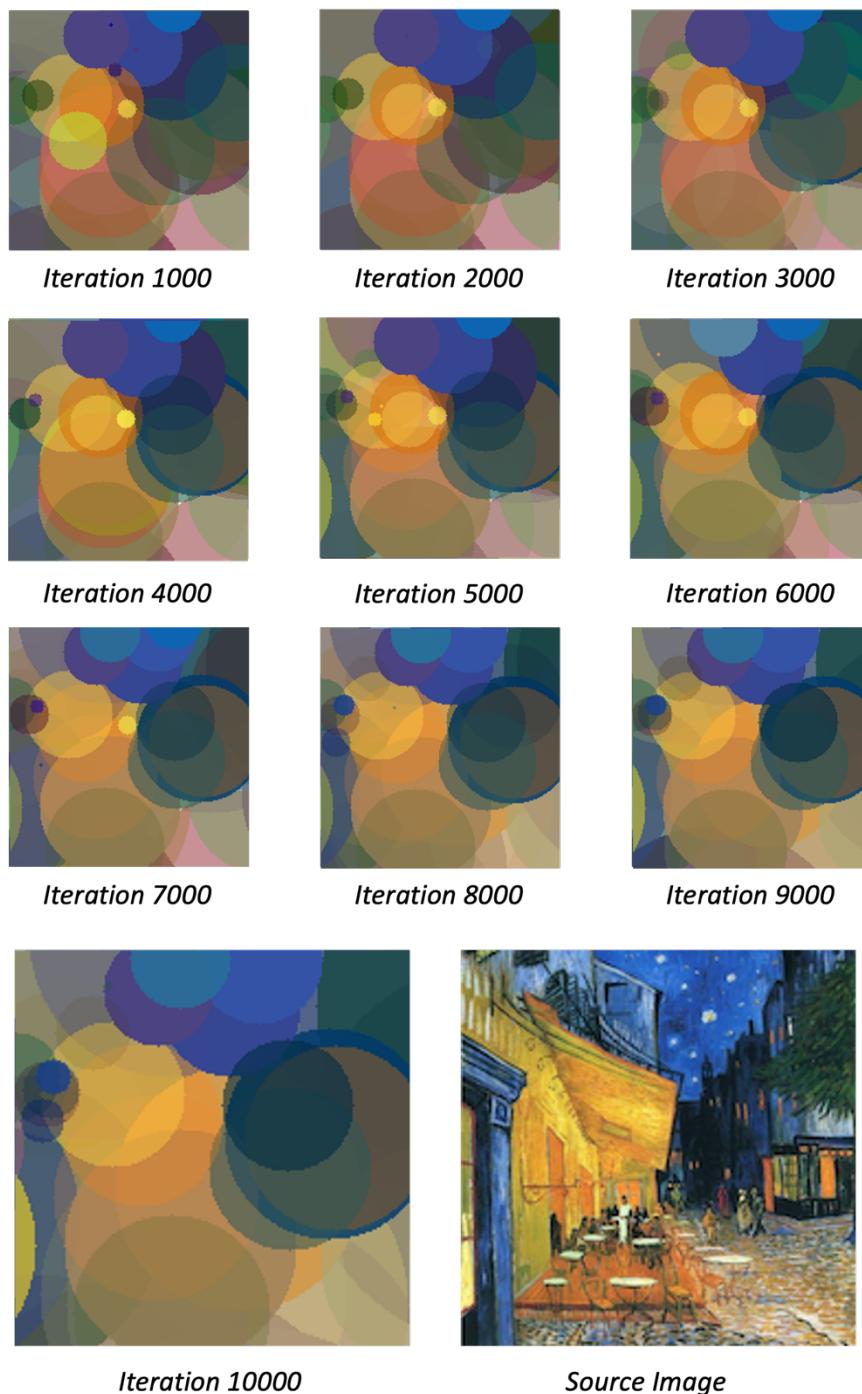


FIGURE 41. FITNESS PLOT FROM GENERATION 1000 TO 10000,  
WHEN FRACTION OF ELITES IS SET TO 0.04.

## **Fraction of elites is set to 0.35**

*Other parameters are set to their default values*



*Best fitness after 10000 generations:*  
**-146890690.0**

FIGURE 42. RESULTS WHEN FRACTION OF ELITES IS SET TO 0.35

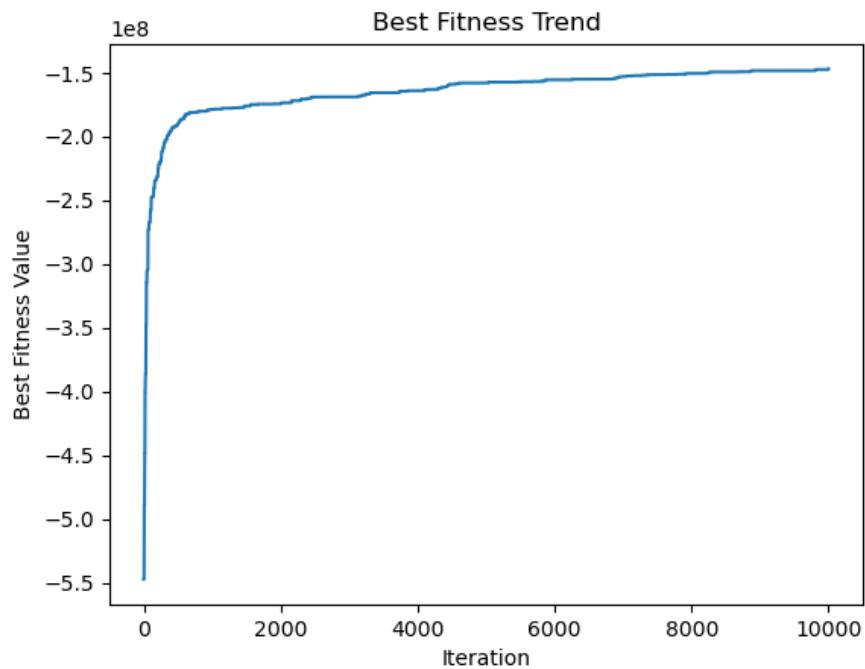


FIGURE 43. FITNESS PLOT FROM GENERATION 1 TO 10000,  
WHEN FRACTION OF ELITES IS SET TO 0.35.

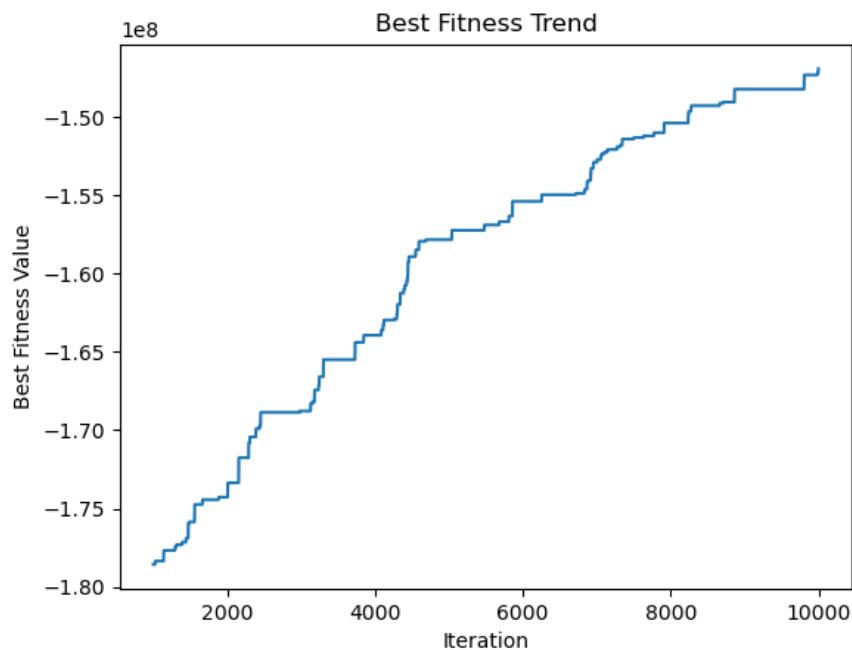
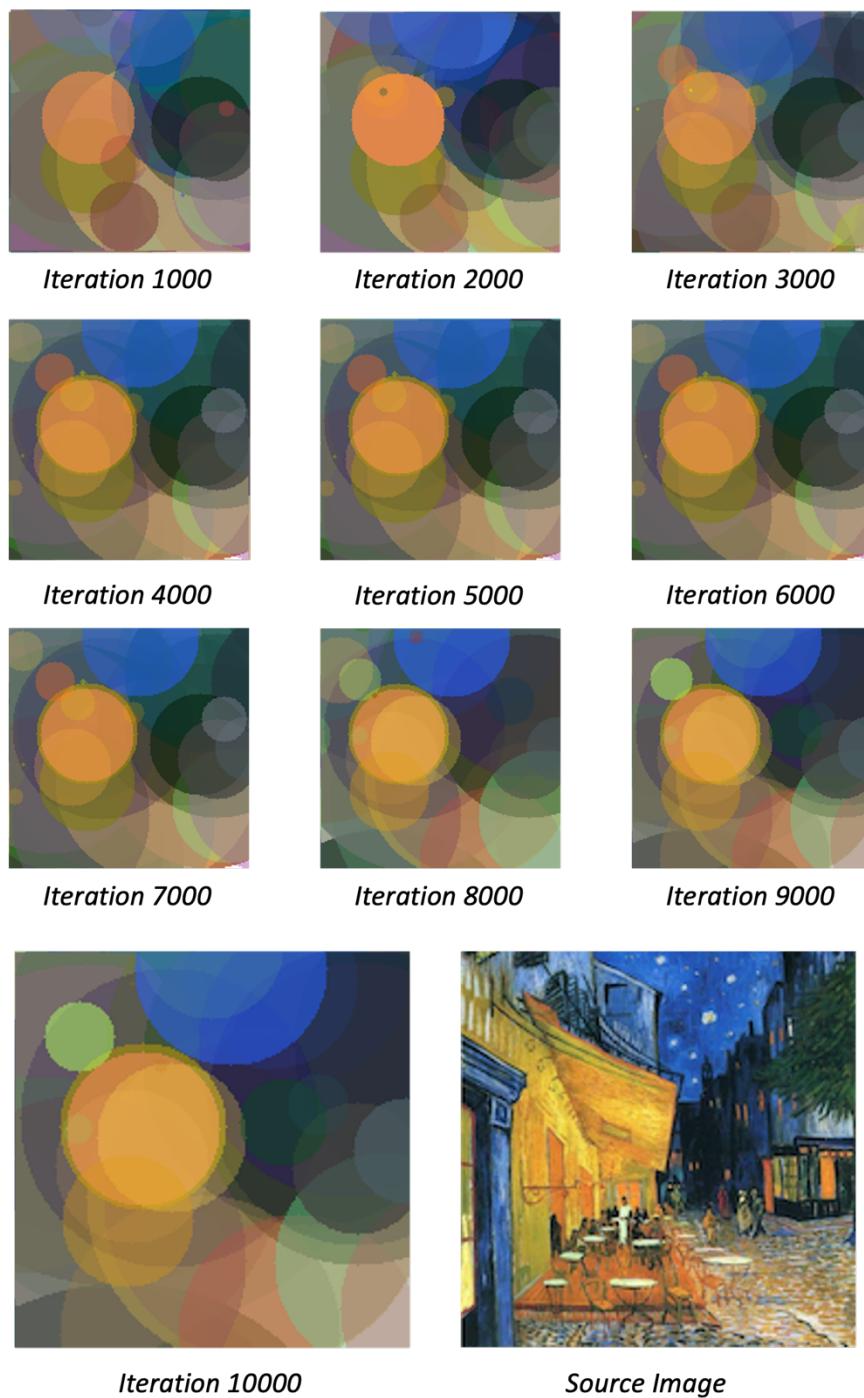


FIGURE 44. FITNESS PLOT FROM GENERATION 1000 TO 10000,  
WHEN FRACTION OF ELITES IS SET TO 0.35.

## **Fraction of parents is set to 0.15**

*Other parameters are set to their default values*



*Best fitness after 10000 generations:  
-150951780.0*

FIGURE 45. RESULTS WHEN FRACTION OF PARENTS IS SET TO 0.15.

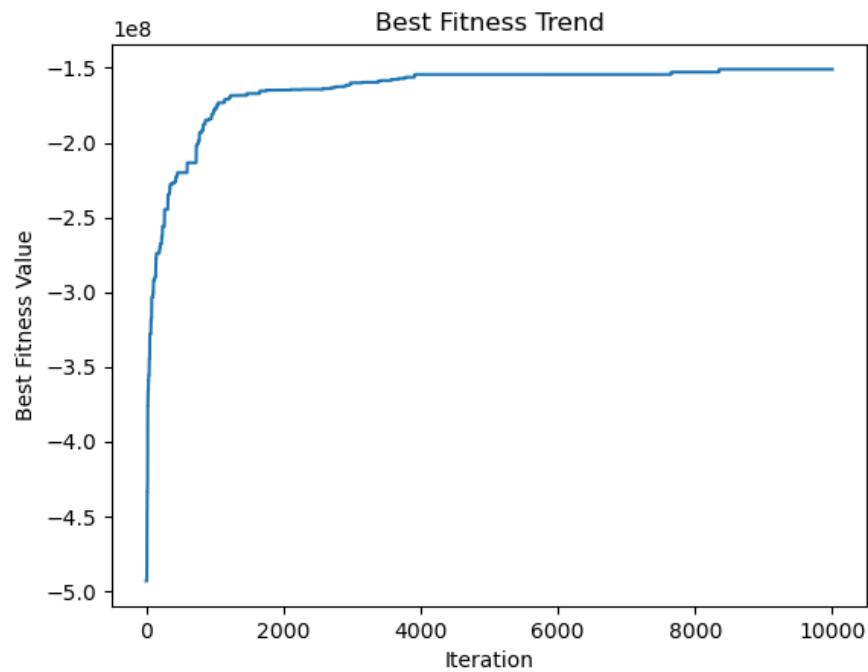


FIGURE 46. FITNESS PLOT FROM GENERATION 1 TO 10000,  
WHEN FRACTION OF PARENTS IS SET TO 0.15.

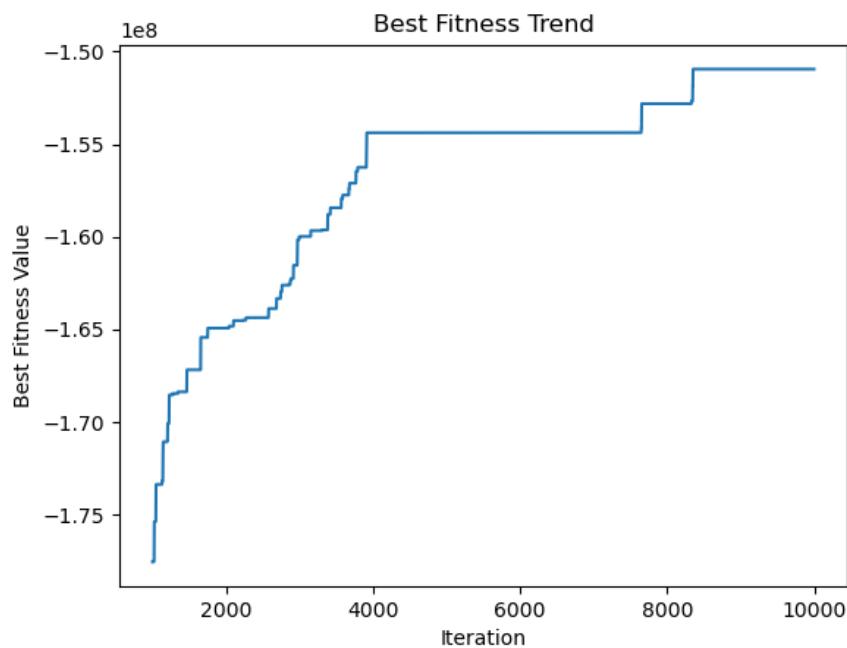
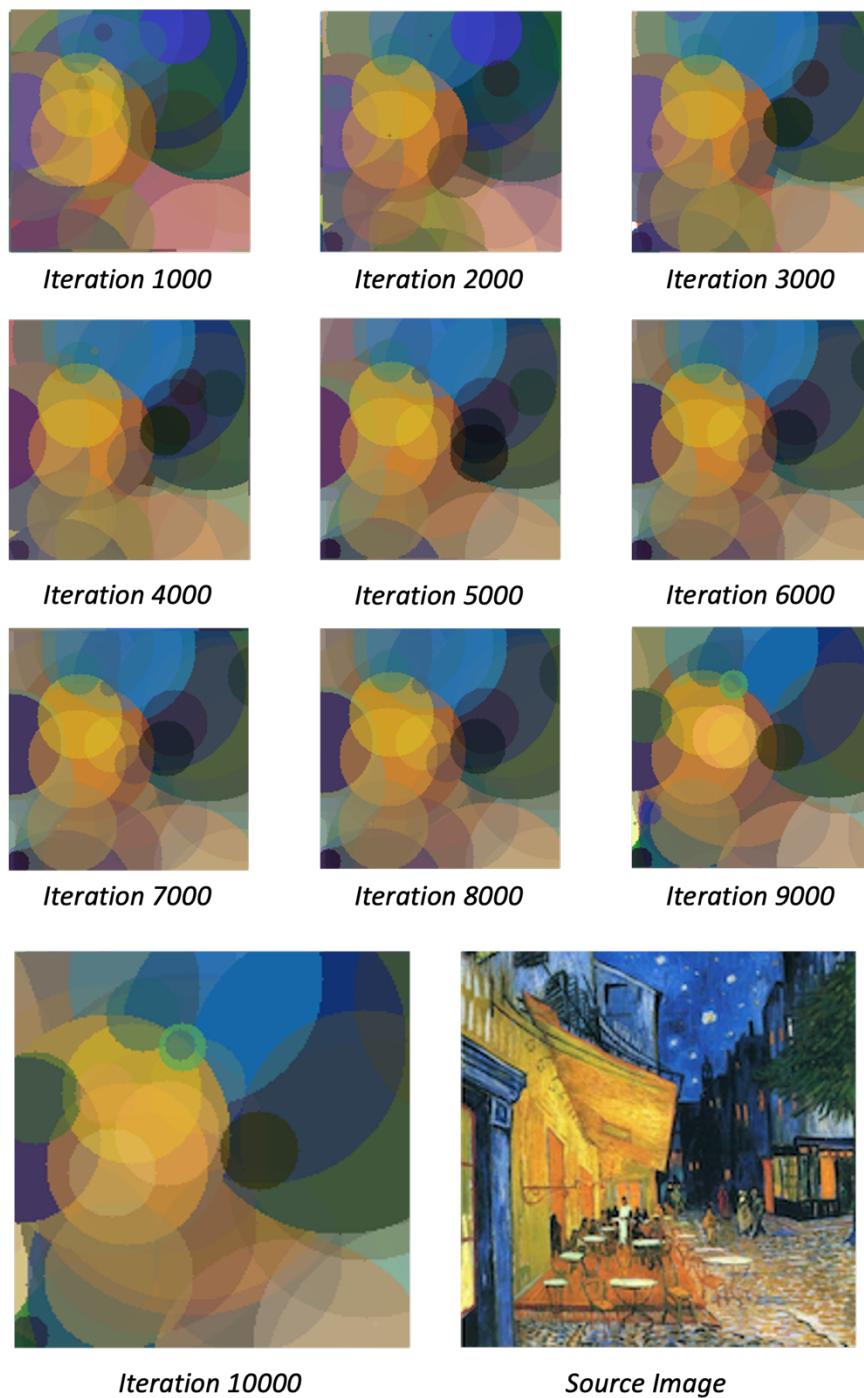


FIGURE 47. FITNESS PLOT FROM GENERATION 1000 TO 10000,  
WHEN FRACTION OF PARENTS IS SET TO 0.15.

## **Fraction of parents is set to 0.30**

*Other parameters are set to their default values*



*Best fitness after 10000 generations:  
**-147087700.0***

FIGURE 48. RESULTS WHEN FRACTION OF ELITES IS SET TO 0.30.

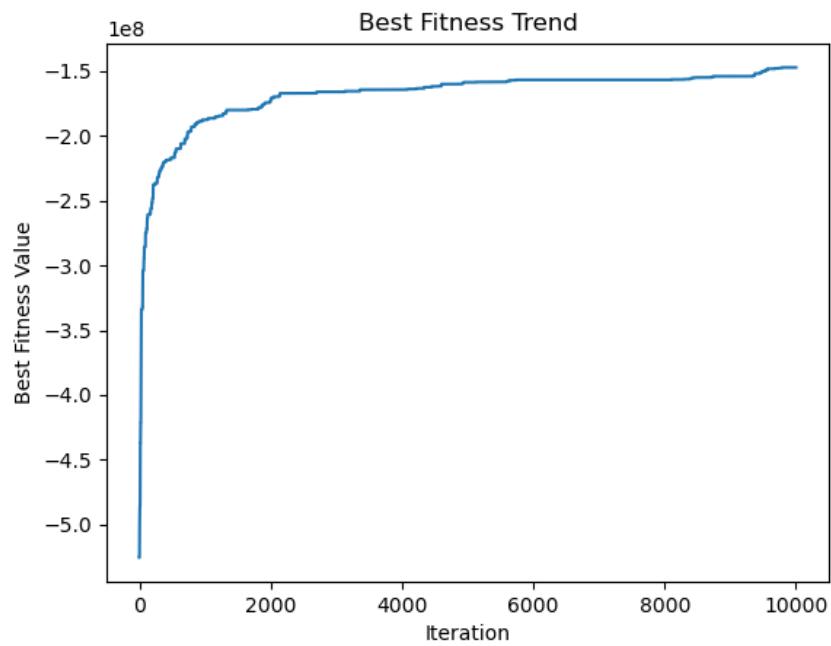


FIGURE 49. FITNESS PLOT FROM GENERATION 1 TO 10000,  
WHEN FRACTION OF PARENTS IS SET TO 0.30.

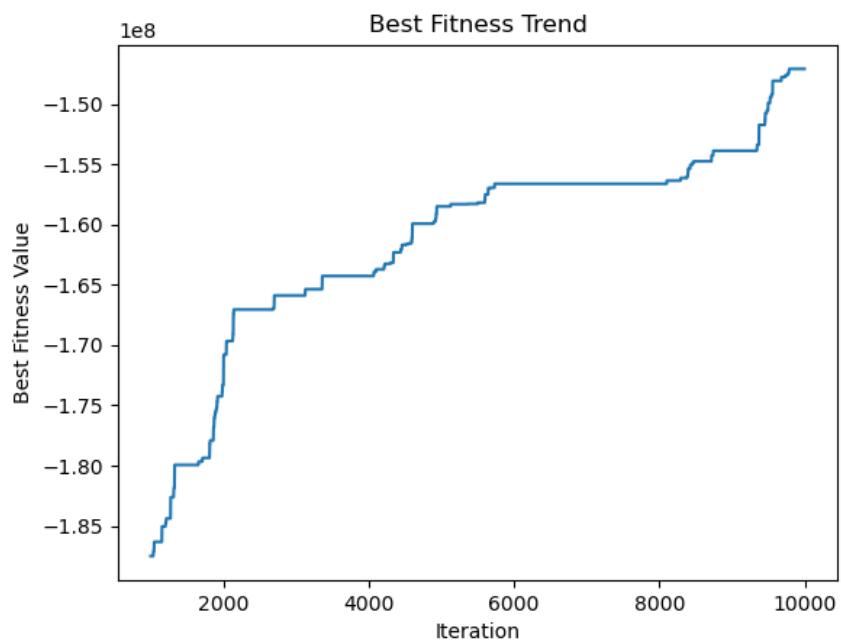
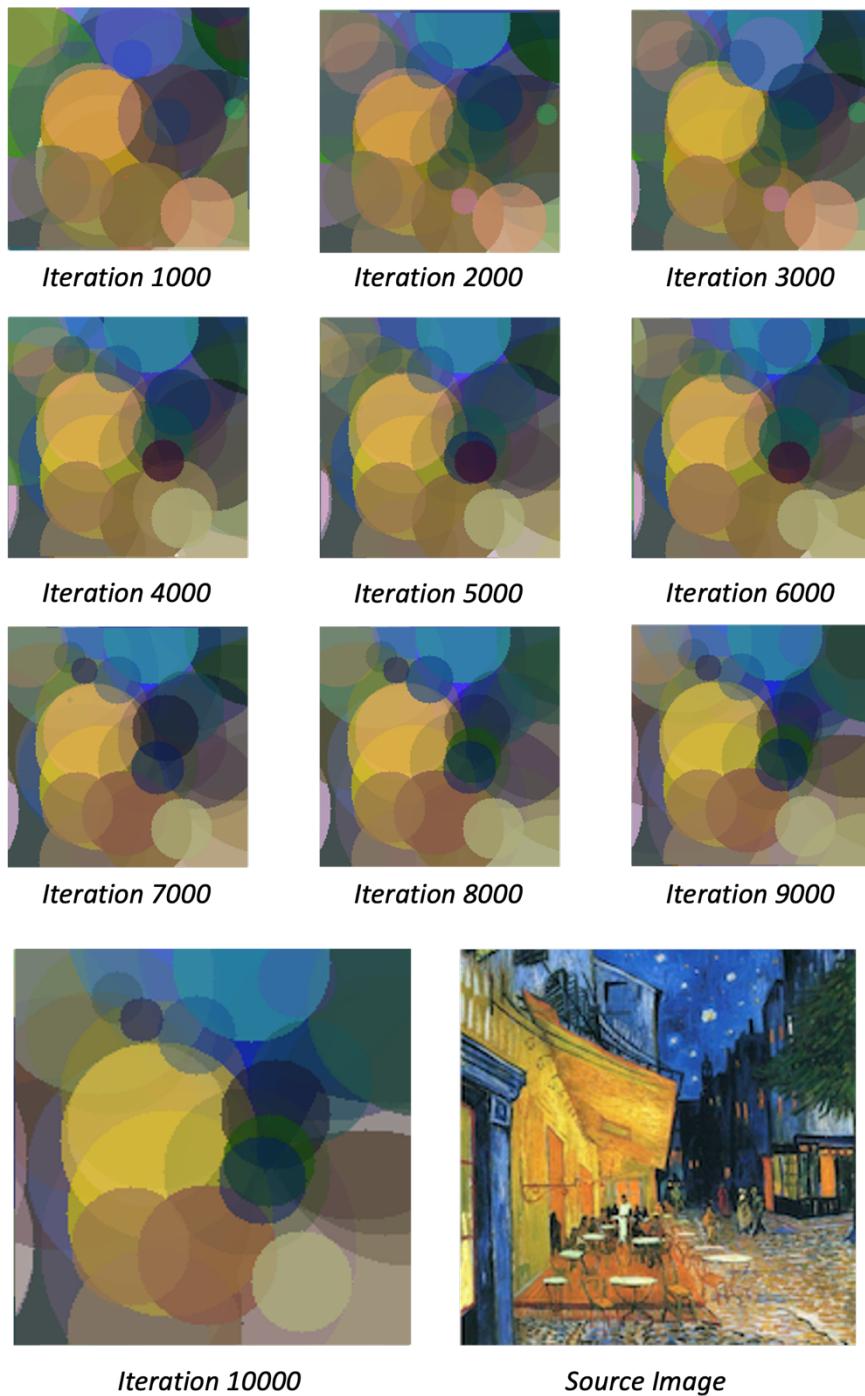


FIGURE 50. FITNESS PLOT FROM GENERATION 1000 TO 10000,  
WHEN FRACTION OF PARENTS IS SET TO 0.30.

## **Fraction of parents is set to 0.75**

*Other parameters are set to their default values*



*Best fitness after 10000 generations:*  
**-139664000.0**

FIGURE 51. RESULTS WHEN FRACTION OF ELITES IS SET TO 0.75.

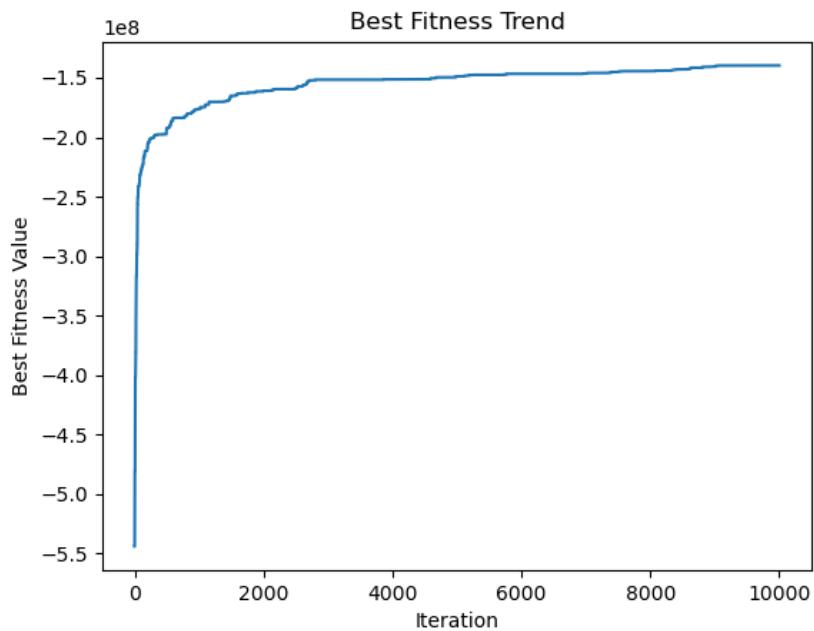


FIGURE 52. FITNESS PLOT FROM GENERATION 1 TO 10000,  
WHEN FRACTION OF PARENTS IS SET TO 0.75.

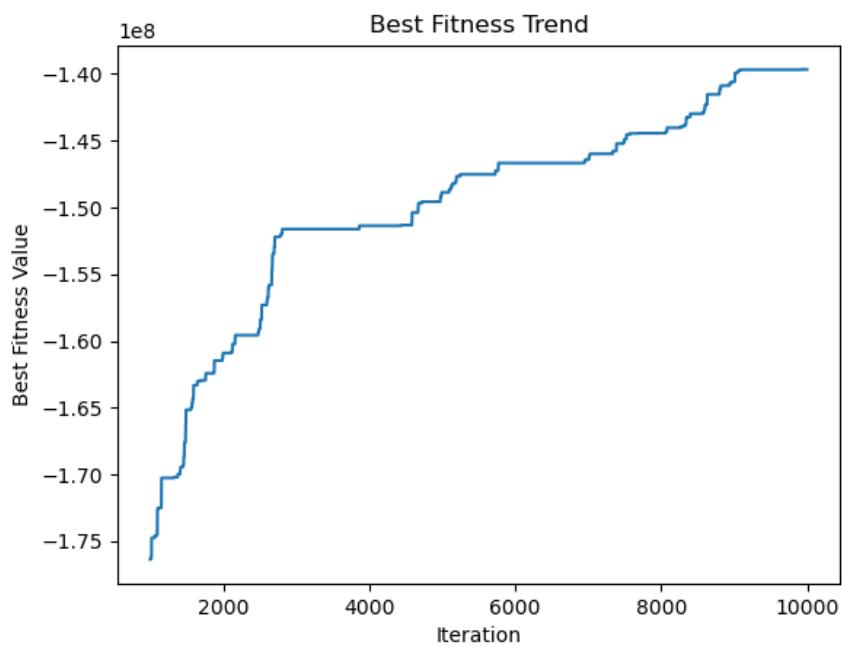
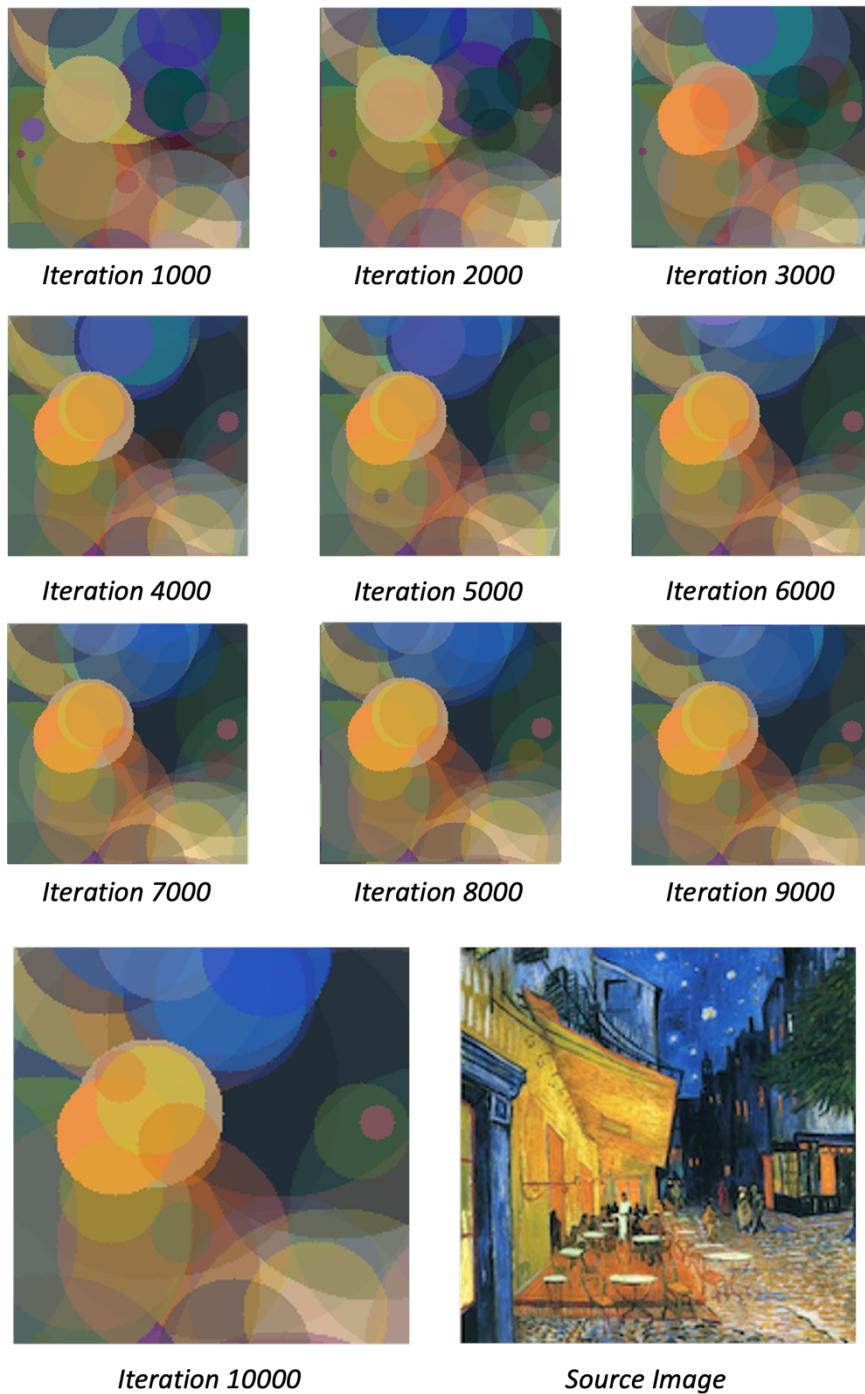


FIGURE 53. FITNESS PLOT FROM GENERATION 1000 TO 10000,  
WHEN FRACTION OF PARENTS IS SET TO 0.75.

## ***Mutation probability is set to 0.10***

*Other parameters are set to their default values*



*Best fitness after 10000 generations:  
-147493520.0*

FIGURE 54. RESULTS WHEN MUTATION PROBABILITY IS SET TO 0.10.

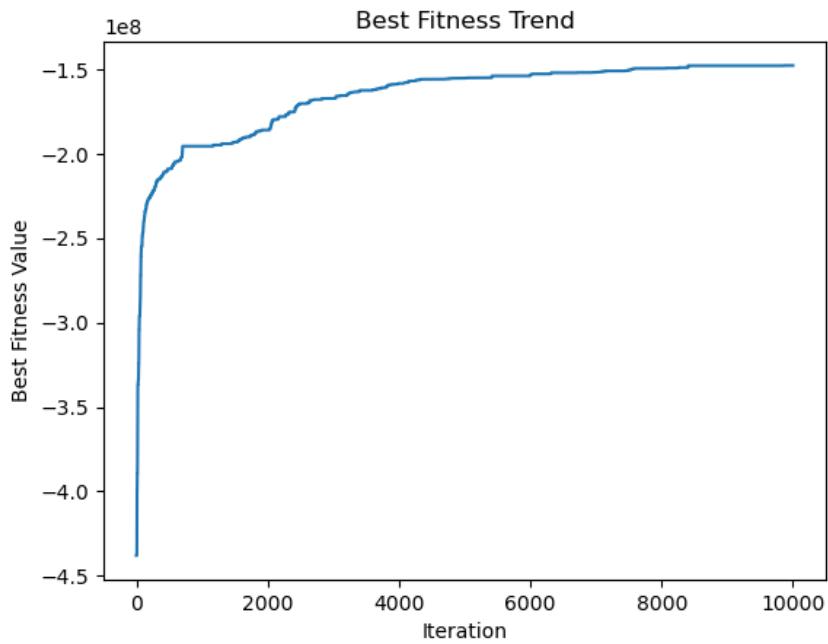


FIGURE 55. FITNESS PLOT FROM GENERATION 1 TO 10000,  
WHEN MUTATION PROBABILITY IS SET TO 0.10.

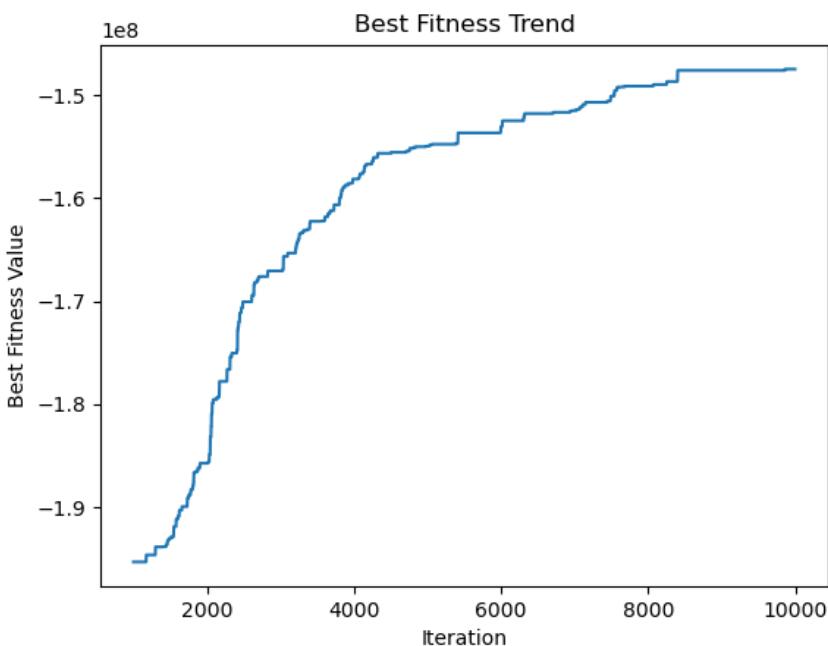
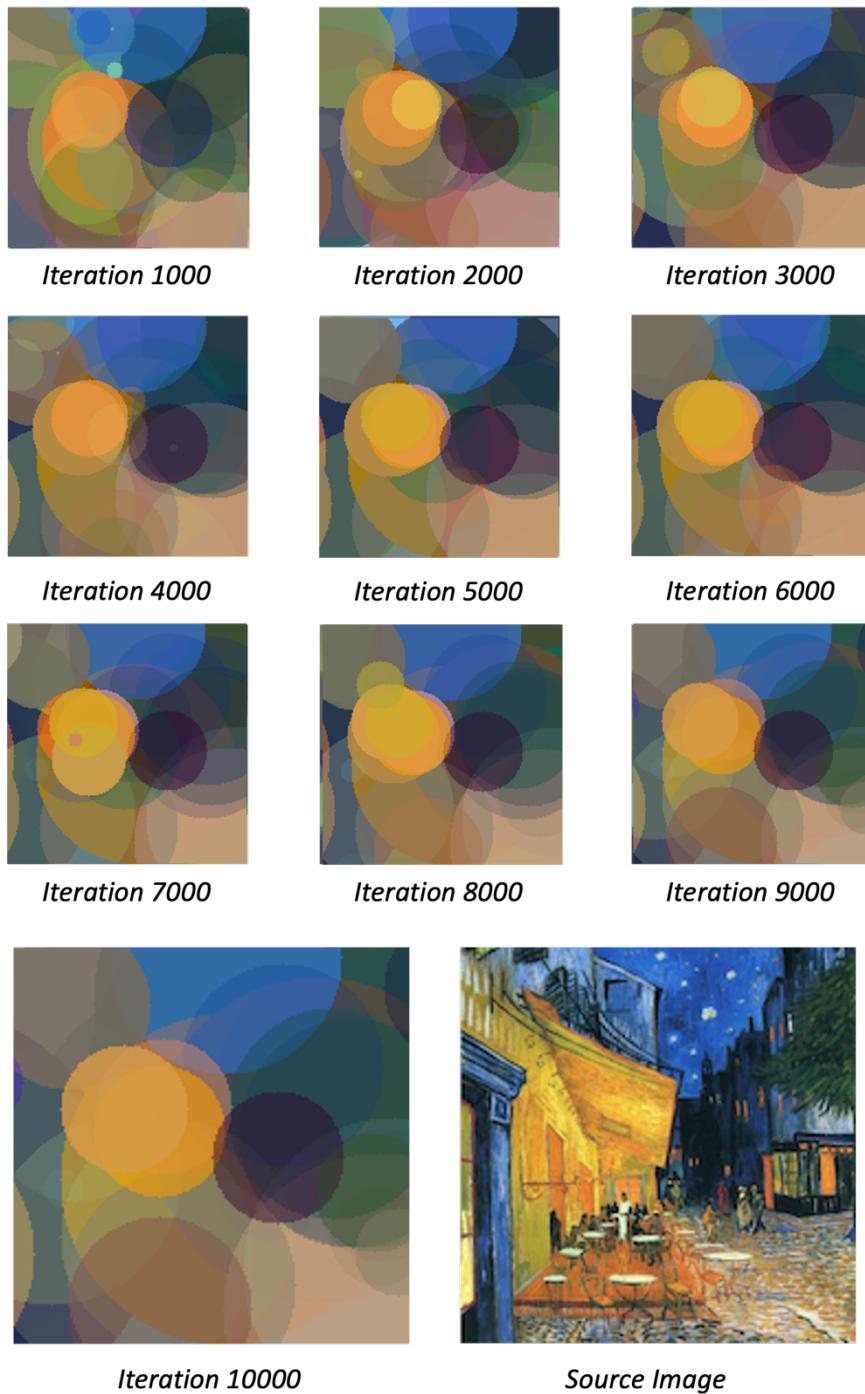


FIGURE 56. FITNESS PLOT FROM GENERATION 1000 TO 10000,  
WHEN MUTATION PROBABILITY IS SET TO 0.10.

## **Mutation probability is set to 0.40**

*Other parameters are set to their default values*



*Best fitness after 10000 generations:  
-148621800.0*

FIGURE 57. RESULTS WHEN MUTATION PROBABILITY IS SET TO 0.40.

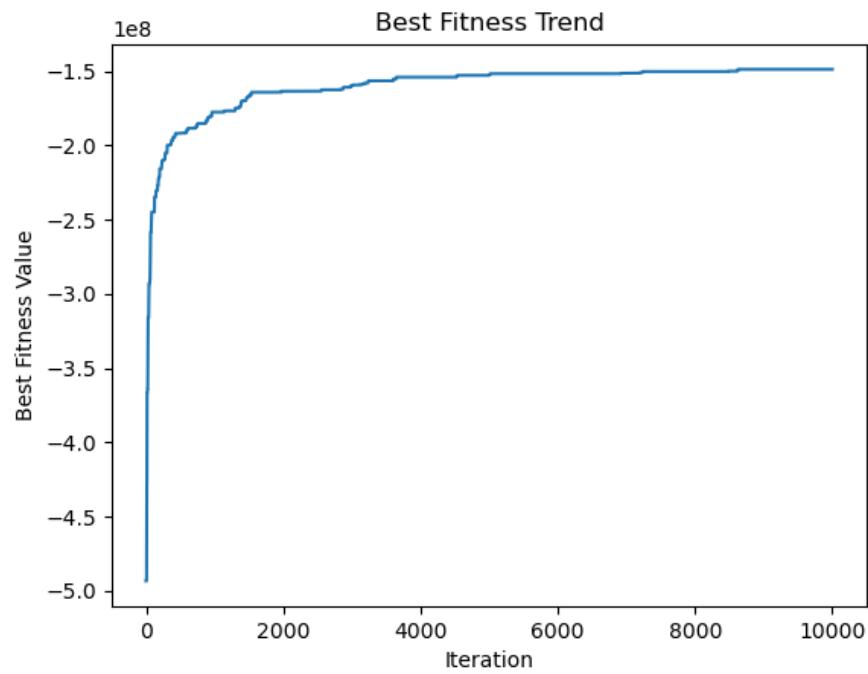


FIGURE 58. FITNESS PLOT FROM GENERATION 1 TO 10000,  
WHEN MUTATION PROBABILITY IS SET TO 0.40.

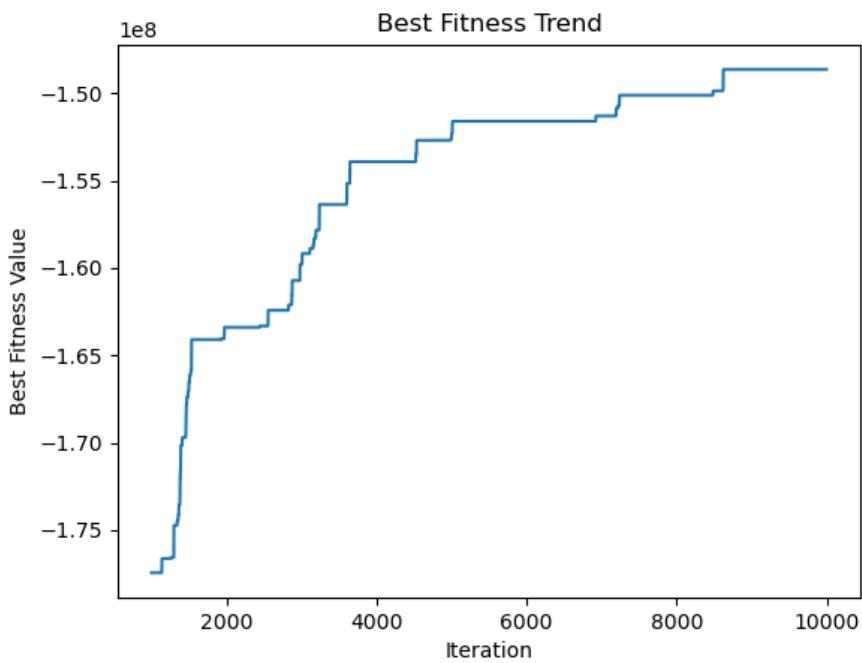


FIGURE 59. FITNESS PLOT FROM GENERATION 1000 TO 10000,  
WHEN MUTATION PROBABILITY IS SET TO 0.40.

## **Mutation probability is set to 0.75**

*Other parameters are set to their default values*



*Best fitness after 10000 generations:  
-155151250.0*

FIGURE 60. RESULTS WHEN MUTATION PROBABILITY IS SET TO 0.75.

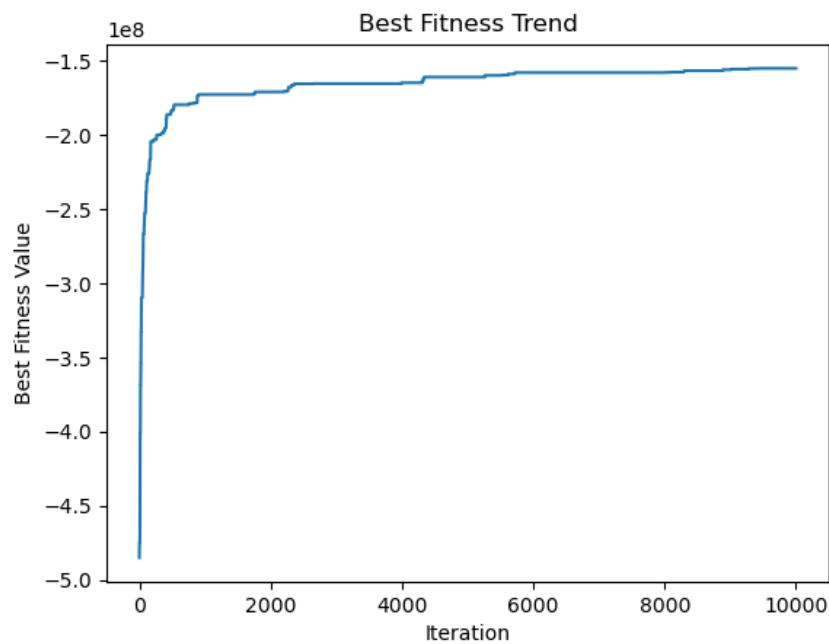


FIGURE 61. FITNESS PLOT FROM GENERATION 1 TO 10000,  
WHEN MUTATION PROBABILITY IS SET TO 0.75.

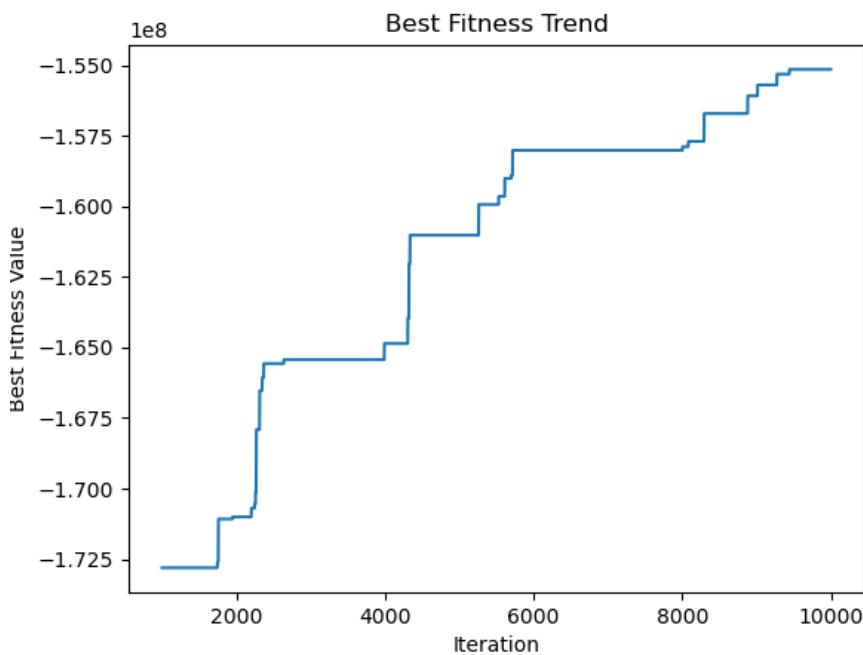


FIGURE 62. FITNESS PLOT FROM GENERATION 1000 TO 10000,  
WHEN MUTATION PROBABILITY IS SET TO 0.75.