

**Dmitry Andreychuk**

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Population: 100 chromosomes each 1000 genes

Crossover: multi-point

Start position: [500,500]

Sausage: [200,800]

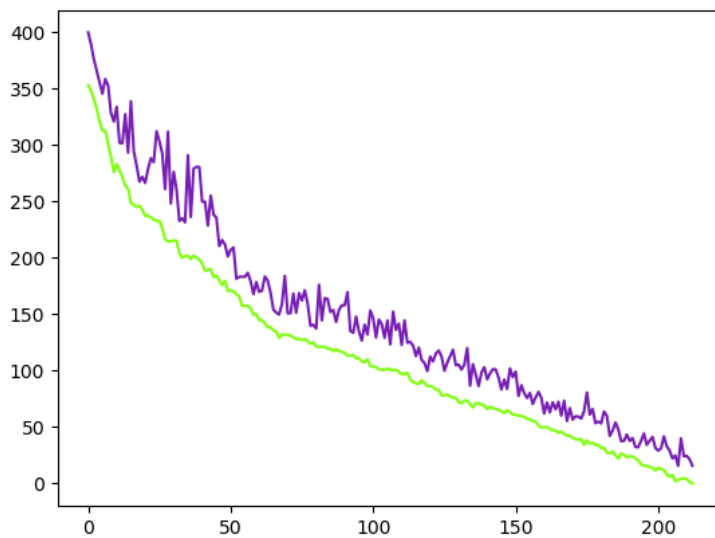
## **1<sup>st</sup> scenario: no mutation**

### **Best and average fitness in generations:**

Number of generations: 212

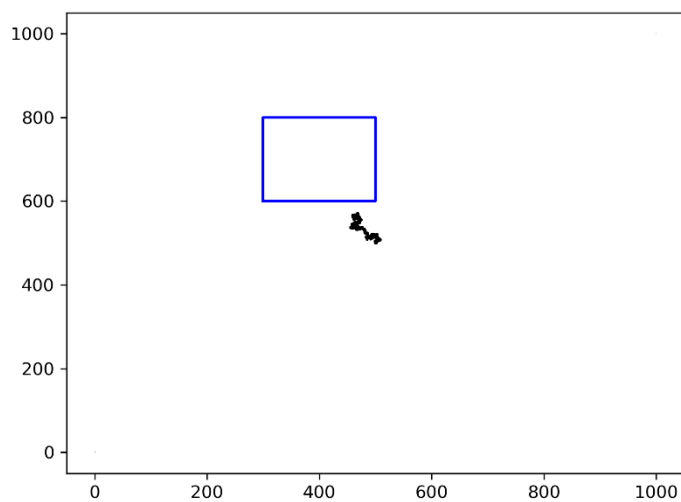
Purple line – average fitness

Green line –best fitness

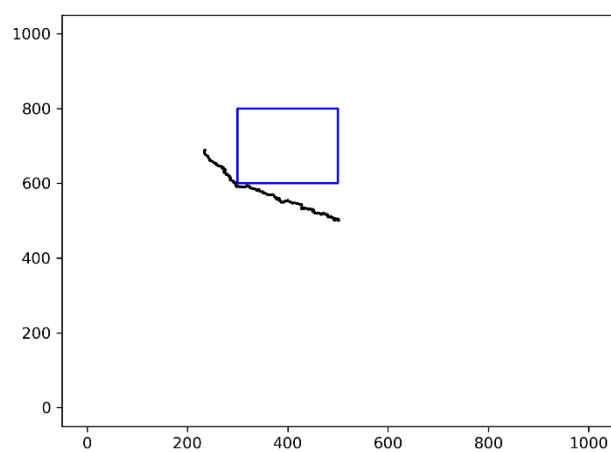


### **Best fitness dog's route in:**

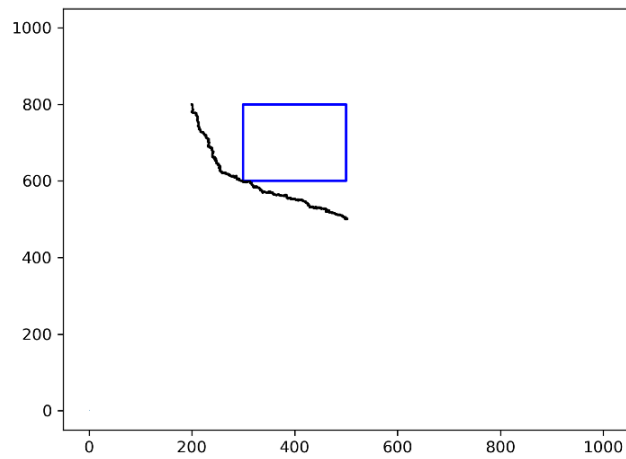
**First generation:**



**Intermediate generation:**



**Last generation:**



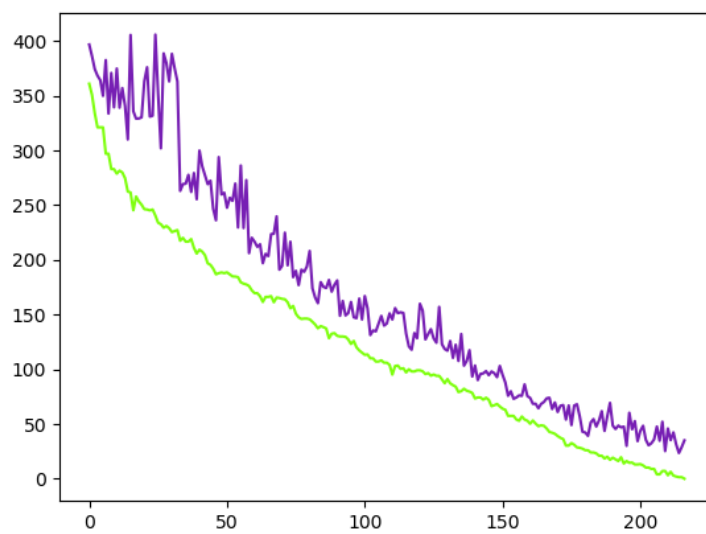
## 2<sup>nd</sup> scenario with 2 % mutation

### Best and average fitness in generations:

Purple line – average fitness

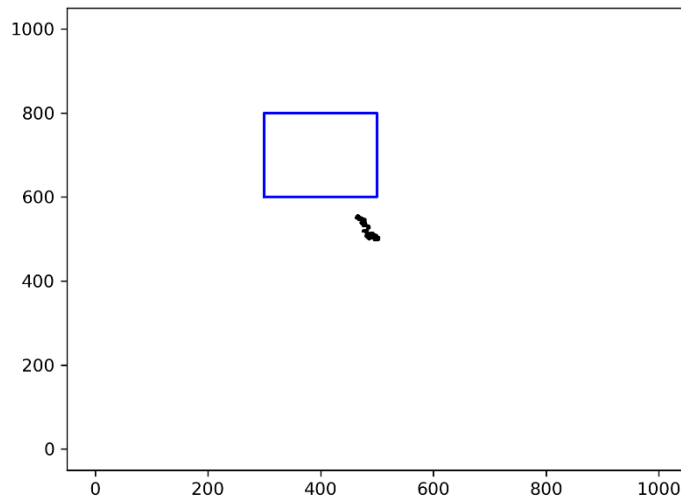
Green line – best fitness

Number of generations: 217

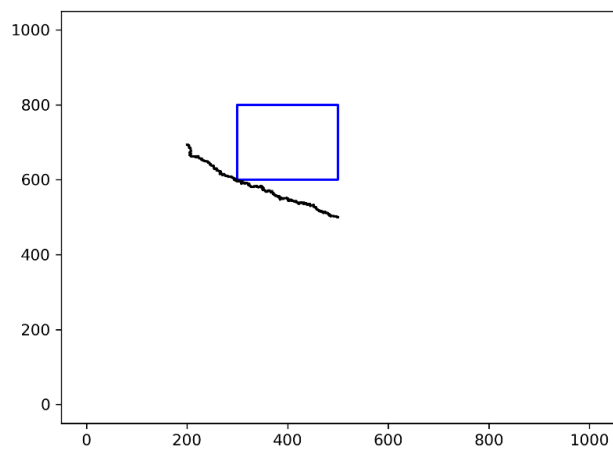


Best fitness dog's route in:

First generation:



**Intermediate generation:**



**Last generation:**

