## Simulated Annealing for Travelling Salesman Problem

Shamil Khastiev
BS-DS-02
s.hastiev@innopolis.university
Innopolis University

April 2022

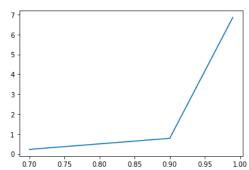
Implementation can be found in GitHub.

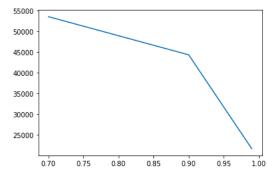
## 1 Experiments - Travelling Salesman Problem

For the experiments I picked up the following annealing rates:

- $\bullet$  0.99 For the slow cooling
- $\bullet$  0.9 For the average cooling
- $\bullet$  0.7 For the fast cooling

Initial temperature is 1000 and minimum is 1. The speed and quality graphs are in Fig1 and Fig2.





Also for each experiment there are graphs which shows the correlation between iteration and length of the path and temperature.

