

## **Assignment 2: Orienteering Optimisation Simulation Modelling and Optimisation 282 758**

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<https://github.com/alexlvla/Simulation-Modelling-and-Optimisation/>

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# 1. INTRODUCTION

## 1.1. Installation



Figure 2: Installation choices

# 2. METHOD

## 2.1. Genetic Algorithm

## 2.2. Distance and Coordinates Allocation

## 2.3. Fitness Function

## 2.4. Optimisation Process

# 3. RESULTS

# 4. CONCLUSIONS

For any progress related to the report please see the public Github repo for alex1v1a or use the link in the cover page to be automatically redirected to this project. The repo provides all relative project information

I have come to a further understanding learned the fundamentals of ROS with the use of such simulation tools like Gazebo. I am aware of other simulation tools available but due to the community support this is a great place to start. The use of plugins with models to be controlled by the teleop python script is used in calibration with the rviz graphical output to help visualise the robots (models) sight.

This is a powerful tool and from the basic level of understanding is an extremely vital aspect of the mechatronics processing, it is a great skill to learn.