Skype meeting 18.04

1. Base SUMO model fully implemented in Python
   1. A simple crossing model implemented with a q-learning method
      1. Files loaded into the simulation
         1. File which describes the network topology and geometry
         2. The *.net.xml* file which is key to the simulation. This contains lots of generated information such as structures within an intersection and right-of-way logic.
   2. Compared with a threshold model that uses LP
      1. Worse results with the deep learning method
         1. To do: try to beat the threshold
         2. To do: redefine action, state vector, timing after further literature reading
         3. To do: improve agent definition
         4. To do: set lower randomness in order to ensure reaching the optimum
         5. To do: REWARD FUNCTION redefinition (probably the main point of the upcoming works)
2. Multiple Position Matrices discussed and understood
   1. To do: try to make use in our model
3. Useful suggestions by Hrvoje:
   1. Distributional DQN
   2. Alpha GoZero videos - Monte Carlo tree search

**Questions aroused:**

1. Network construction:
   1. Any particular that we could work on? Any changes to the base/working one?
2. AWS Machine set-up
   1. Should it be our working environment? Any suggestions here?