

WEEKLY STATUS REPORT #2

GROUP NUMBER: 31

AUTOMATIC TRACKING OF ACTORS WITH INTELLIGENT THEATRICAL LIGHTING SYSTEMS

OCT 19TH, 2019

We have met with our advisor once again last Monday on Oct 7th where we discussed the potential financial aspects in the project. We have agreed on a budget of \$500 to cover all parts we might need to build the project.

Our team is still working on testing the options of our design. We have the alternative of either implementing a camera to detect the actor's face and follow it or having a transmitter sending the location to the spotlight and move it accordingly.

We have Started playing around with OPENCV as a possible library to use for tracking people, we have tried different sample code and found sample code to track an object using color, so far it is just objects with colors, not really people. We are in the process of using that sample code for our own usage. As for tracking people using a transmitter, we are still seeing what is best to use that is in our budget and small enough to put on actors.

The desired transmitter uses ultra-wideband which is some sort of a short-range radio frequency, high bandwidth. This transmitter detects the actor over stage, then moves the spotlight according the position of the actor. We found such transmitter in pozyx website, a European company specialized in embedded system drones and tracking technology devices.