WEEKLY STATUS REPORT #3

GROUP NUMBER: 31

AUTOMATIC TRACKING OF ACTORS WITH INTELLIGENT THEATRICAL LIGHTING SYSTEMS

OCT 27TH, 2019

This week we had our biweekly meeting with our advisor to discuss our progress. Our research has branches out really wide in perspective of the methods we are suggesting tracking the actor on stage. We are not talking about how to control the spotlight yet, we are still working on getting the correct location of the actor to then program it into the spotlight and follow him.

Our adviser suggested bringing all possible solutions in a table to look at all together and make an informed decision about the method that we want to follow through with. The method that we ultimately choose must be within budget, accurate, and serve the purpose of locating the actor to follow him with a spotlight. The following is the table that our team created of suggested methodologies.

Method	**Accuracy (%)**	**Cost**	**Advantage**	**Disadvantage**
Antennas &transmitter	%99	High	Have the choice of tracking manually or automatically	Too expensive
Infrared Camera	------	Low	Potential to easily switching targets without multiple tracking devices	Hard to work with, inconsistent tracking.
Localino	+/-10 cm	$159	It has a scalability, user-friendly, and high-quality design and open source software	----------
Indoor GPS	Precise (+/-2cm)	Low-moderate	Precision is exact and performs well indoors	Beacons must be mounted on the walls around the corners of the stage.