ECE Senior Design Weekly Report

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Team Name: The Globetrotters Lab Section: 4

Week’s Task: Researching viable options to levitate our globe and also work on preparing the PowerPoint template and organizing the slides for our presentation.

Results: My research mainly consisted of finding viable means to levitate our globe with most of the results involving a sort of magnetism. I found numerous examples on Google, Youtube and science pages I follow on Instagram. However, I found from the various videos demonstrating the “ease” of levitating an object that the most difficult part of levitation is the maintaining the stability of the object. From hearing Chris’s findings from his research, he found that feedback controls (EE420) plays a great deal in being able to maintain the stability of our system. This is helpful to know because with the knowledge Chris, Jake and I have gained from EE420, we felt comfortable in going this route.

After meeting with my group this past Tuesday, we decided to look into various other methods to levitate our globe in order to have options and we are not limited to just the use of magnetism for levitation. This led me to delve into air maintaining our globe’s position. This came as an idea to me because I was reminded of the demonstrations they have at science museums where a ball can stay afloat when in the airflow of a leaf blower or something of the sort.

As for the PowerPoint, we now have our template which each member can fill out their respective slides and are assured of some uniformity. It is also useful because this template can be used for future presentations minus the need for minor adjustments if need be.