

Names of Students in the Group:

Daniel Altman, Joseph Sholl, Timothy Reilley

Avisors:

Mr. Gutschlag

Dr. Anakwa

Exact Title of the Project:

Controller Design for a Linearly Actuated Active Suspension System

No More than 8 Lower Case Letter Acronym for the Project:

cdlaass

University Login Name of Each Student in the Group:

draltman, jsholl, treilley

A Brief Description of the Project:

For this senior project we will design a controller for an electric linear actuator-based active suspension system. Initially, a position sensor will be used to determine the location of the “vehicle,” relative to the “wheel” position. The controller will use this information to engage the linear actuator to keep the mass at a relatively constant position. The addition of an accelerometer to the system will eventually be investigated to control the acceleration levels experienced throughout the range of available “wheel” displacement. LabVIEW will be used throughout the project as the controller platform. An additional deliverable of the project will be the creation of a tutorial (or guide) on the use of LabVIEW in controller design and implementation. The guide will provide future Bradley students with a knowledge base to begin using LabVIEW.