Capstone Project Description

***Problem Statement****:*

The goal of smart devices and home assistants is to automate everyday tasks and make life easier. Consumer goods like the Google Home and Amazon Echo integrate into smart systems and perform tasks following a voice command. These devices make life easier for their users. Speech recognition technology can be used all over the world to improve the lives of many. This project will create a speech recognition system using machine learning algorithms and apply the algorithm to an end user application. The goal is to create an accurate system that can be used in a public setting (i.e. map navigation in a subway station).

***Objectives****:*

* Gain a deeper understanding of machine learning techniques and training ML models.
* Train a machine learning model.
* Test model using different microphones.

***Deliverables****:*

* Accurate machine learning algorithm that recognizes speech and performs an action.
* User application/device that turns speech into text (write an essay without typing).
* Final Report