**Handwritten Digit Recognition Machine Learning Project Writeup**

* **Problem Statement:** The goal of this project is to build a machine learning classifier that is able to correctly identify handwritten digits.
* **Potential Methods and Models**: This project will rely primarily on K-Nearest Neighbors and Random Forest classifier modeling to distinguish the digits in the images. Convolutional Neural Networking may potentially be incorporated to improve accuracy.
* **The Data**: The data files contain gray-scale images of hand-drawn digits, from zero through nine. Each image is 28 pixels in height and 28 pixels in width, for a total of 784 pixels in total. Each pixel has a single pixel-value associated with it, indicating the lightness or darkness of that pixel, with higher numbers meaning darker. This pixel-value is an integer between 0 and 255, inclusive.
* **Benchmarks**: Benchmarks from highly successful projects similar to this range from 97-100% accuracy.
* **Goals**: My goal is to build a classifier with at least 95% accuracy.