CSE 5334 **Project Proposal**

A Pokedex Mining System

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Introduction

As a kid I indulged in the Pokemon franchise, from watching their anime to playing many of their initial video games. Overtime, this passion for video games ended but I was still fascinated how this whole Pokemon world worked. Especially, when it came to the pokedex entries and its functionality.

Proposal

For this project, I propose a pokedex mining system, modeled after Nolan Lawson's pokedex.org, using his own data set found at his github page. This dataset contains 649 pokemon entries with pictures, each with a sentence description, plenty of numerical attributes and move descriptions ranging from two to five sentences. In this mining system one will be able to freely search through the dataset, be classified as a certain pokemon or type, and be able to caption an image of any pokemon in the database.

Website Features

My contribution would be to incorporate a free search component, in which a user will be able to search for anything within the database, ex: "what is the most effective type agaist water type pokemon" will return a ranking of counter types against water types. Additionally, a user will be able to input a description of themselves to be classified as either an existing pokemon or of a general type. Lastly, this application will be able to caption a pokemon image by identifying the pokemon in the image.

Demand

Similar websites to this concept include the website pokedex.org, pokedream.com, which are limited to a pokemon name filtering search engine. And the image recognition would be similar to the one from deep learning pokedex adapted to work on a still image as oppose to a live video. These are some of the closest website applications and concepts that I found to be most similar to what I expect this data mining system to exceed.