PROJECT TITLE: Predicting Opioid Addiction Likelihood Using Neural Nets

PROJECT SUMMARY: Utilize artificial and convolutional neural networks in TensorFlow to classify individuals at risk for opioid addiction based off socioeconomic, familial, and personal health data.  Datasets include US Census Data, Center for Disease Control, and National Institute on Drug Abuse.

MILESTONES:

* Data collection - TO BE DONE
* Data exploration - TO BE DONE
* Feature Exploration - TO BE DONE
* Build models: ANN, CNN - TO BE DONE
* Model Tuning – TO BE DONE
* Result visualization - TO BE DONE

PROPOSED ‘TO DO’ FROM THE LAST WEEK (Copy & Paste from your previous week’s TO DO)

THIS WEEK’S PROGRESS

This week I focused on identifying which sources of data would be the most helpul and exploring research articles that have already explored similar questions. It turns out that there is a great deal of data available, which can be both a blessing and a curse. I have found datasets through data.gov, the CDC, the NIDA, and the Department of Health and Human Services.

ISSUES AND DISCUSSION:

I am glad to have found a great amount of data related to my project, but the issue will be finding data that is meaningful, being able to export and store it, and being able to identify features that are most important.

TO DO:

This week I need to focus on finalizing the datasets that I actually intend to use, and continuing to research the opioid epidemic as well to get a better understanding of what sort of features contribute to the likelihood of addiction. I hope to have all the data compiled and stored in AWS by the end of this coming Week in order to start the exploration.

RESOURCE (Optional: list resource or links you want to share with me):

<https://www.cdc.gov/drugoverdose/epidemic/index.html>

<https://www.drugabuse.gov/drugs-abuse/opioids/opioid-overdose-crisis>

<https://www.hhs.gov/opioids/about-the-epidemic/index.html>