

Applied Machine Learning - Project 04 - Exploring Beyond

General Thoughts:

- In some previous class, you may have done a project that would partially or totally satisfy one of the ideas below. **YOU MAY NOT SUBMIT THAT PROJECT.** Take this opportunity to explore something new. I'd rather you try something new, give it your best, but the idea not work out (you shoot for the moon and land among the stars) rather than rehashing something you've already done (you shoot for Dallas Hall and land in a fountain).

Topic Options:

1. Exploring Feature Space and Dimensionality Reduction - Do you need all the predictor variables/features you currently have? For some data set, explore how 2 - 3 dimensionality reduction techniques compare with each other.
2. Create a Publicly Available Machine Learning Resource
 - Take a dataset, build a model, make the model publicly available on the internet via a Streamlit + Heroku deployment. The UI should allow the user to enter values for predictor variables and provide the predicted values
 - You could also provide a web service for a pre-trained publicly available machine learning model such as blurring people's faces in images. But your project can't simply be communicating with an already implemented API.
 - You could also do the above but deploy on AWS
 - Make something with a webUI, not a REST API.
3. Choose a paper from Papers With Code on a topic you're interested in and reproduce the results. Do a small extension to the paper such as:
 1. Try the analysis on a new data set.
 2. Compare with an additional similar technique not covered in the paper
4. Some other idea?

Bottom line, I want you to do something cool in the remaining two weeks. I want it to be something you'll be proud to show your family and a potential future employer.

More to come on deliverables...