Creating your own project



Capstone project

- Combine what you have learned into one project to show your data science skills and problem-solving skills.
- Must involve machine learning and some form of data.
- Must create visualizations and tell a data story with your project.



What to do?

 Solve a problem that actually exists in society or business.

Data at:

https://github.com/awesomedata/awesome-

<u>public-datasets</u>

https://github.com/datasets/awesome-data

https://github.com/academic/awesome-

datascience#data-sets

You don't have to use dirty data.



Examples

 Modeling flight paths and figuring out when and where cancelations will happen, Trading stocks, traffic planning, police strategy, better gaming AI, etc.







Advice

- Good data is hard to find and usually costs a lot of money.
- GPUs are a must for deep learning. Training time is several times faster on GPU vs CPU.
- You can use cloud computing methods such as AWS or Google Colab instead of buying your own GPU. Colab also offers TPU support.



Visualizations and Testing

- Make sure visualizations are clear. Show it to a lay person that you know and explain your project. If they don't understand your visualizations, then they are bad.
- Make your code reproducible and testable for other people. If other people can't follow what you did and get the same results people won't trust or listen to you.

