9/30/2018 Slide presentation

- · slides created from Jupyter notebook using nbviewer
- basically, create a notebook with markdown and code, run nbviewer, get html/pdf slides
- command used was jupyter nbconvert --to slides --reveal-prefix reveal.js --SlidesExporter.reveal_scroll=True Slide\ presentation.ipynb
- see https://medium.com/learning/present-your-data-science-projects-with-jupyter-slides-75f20735eb0f (https://medium.com/learning_machine-learning/present-your-data-science-projects-with-jupyter-slides-75f20735eb0f)
- disadvantages
 - more cumbersome than Powerpoint, Google Docs slides
 - less snazzy (although you can in theory do anything you want with e.g. HTML templates, CSS)
- advantages
 - one source for code and presentation (update code and rerun your notebook, get updated slides)
 - can include JS output with rollovers, Google Maps etc.
 - can post or distribute HTML slides with interactivity (those require reveal.js https://revealjs.com/#/(https://revealjs.com/#/))
- for this project, probably would have been easier to do Google Docs slides
- · people asked how we did the map
 - data from here https://data.cityofnewyork.us/api/views/kk4q-3rt2/rows.csv?accessType=DOWNLOAD (https://data.cityofnewyork.us/api/views/kk4q-3rt2/rows.csv?accessType=DOWNLOAD)
 - Bokeh from here https://bokeh.pydata.org/en/latest/docs/user_guide/geo.html (https://bokeh.pydata.org/en/latest/docs/user_guide/geo.html) (see gmaps example)
 - For income tiles, http://data.beta.nyc/dataset/median-household-income-2010-census-tracts/resource/74cdcc33-512f-439c-a43e-c09588c4b391 (http://data.beta.nyc/dataset/median-household-income-2010-census-tracts/resource/74cdcc33-512f-439c-a43e-c09588c4b391)
 - The actual code is pretty kludgy/filthy, but happy to share, lmk and can share as is (YMMV) or maybe try to clean up

```
<style type="text/css">
    .input_prompt, .input_area, .output_prompt {
          display:none !important;
     }
</style>
```



Rainfall and Subway Traffic

An analysis of potential improvements to mobile food operations



Goodwin, Druce, Matt



Business Problem

Rain disrupts business



What can we do about it?



Idea

Identify locations in the city where foot traffic is most affected and least affected by rainfall Utilize knowledge to move food trucks as weather changes

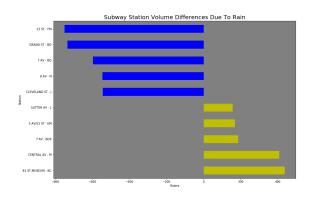
Methodology

Data sources: NYC MTA turnstile data, Daily rainfall data from Weather Underground

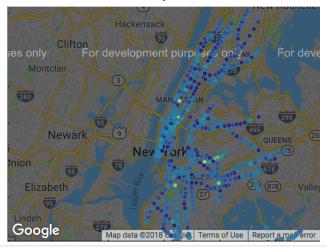
Time frame: 9/22/2017 - 7/31/2018

Assumptions: Turnstile entries + exits serves as proxy of daily foot traffic volume

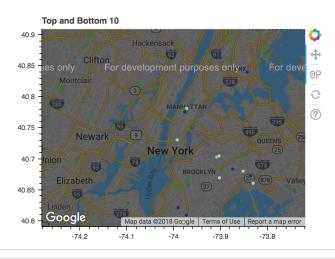
Different stations exhibit different traffic patterns during rainfall



Geographical study



Top and bottom 10

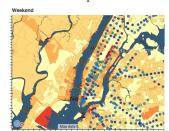


Top and bottom 10 - Where to move!

Top and Bottom 10



Future considerations



- Five years of dataIncome filtersRestaurant filters

- Distance optimization

