Out in Tech Final Presentation:

Data Science for Public Policy Analysis

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About Me

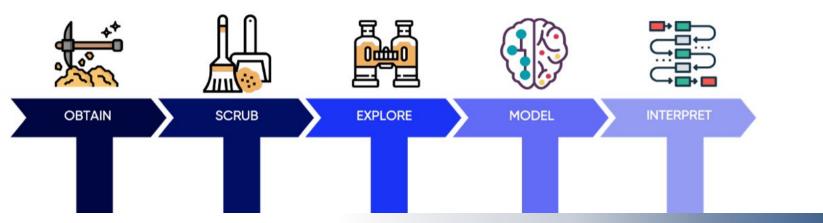
- Recent NYU graduate studied Politics, Economics and Social Cultural Analysis.
- Interested in the intersection of data science and public policy.
- No previous coding or CS skill-set.
- Goal: Learn how to use data science as an enhancement tool to produce socio-politically conscious initiatives, products and programs for underserved/underrepresented communities.



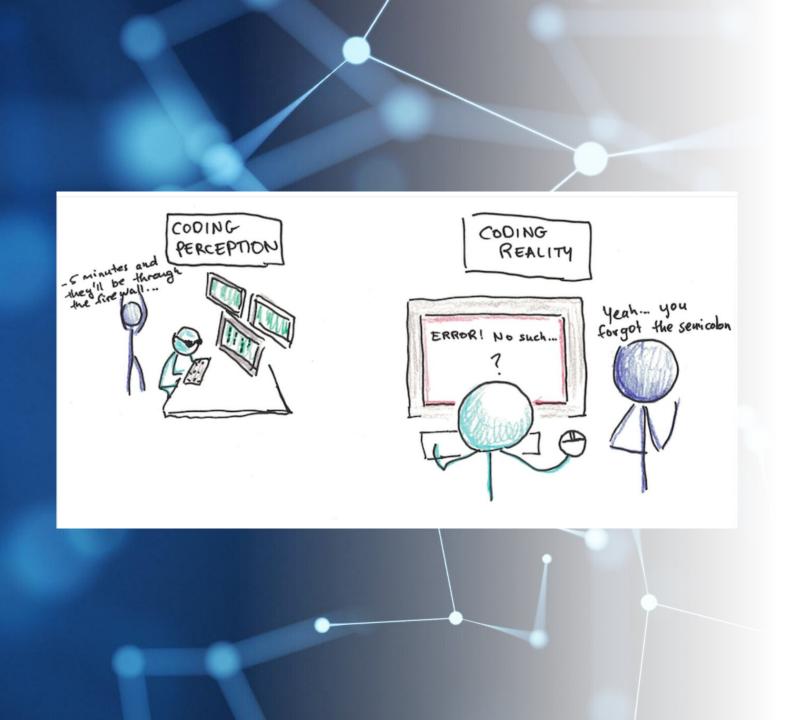
What I learned: What is Data Science?

Data Science Process





Gather data from relevant resource Clean data to formats that machine understands Find significant patterns and trends using statistical methods Construct models to predict and forecast Put the results into strategic use



What I learned: Python Programming Language

Basics

- Environment Set-up: Jupyter Notebook
- Python Lingo
- Data Types

Logic

- Operators
- Conditions
- Functions

Exercise

- Review sample problems
- Interactive problem- solving sessions with mentor to further develop my skill of mapping an approach before beginning to write code
- Listing the logic tools (e.g. function, condition, etc.) needed to produce the desired output

Application

- Attempt independent problem solving based on acquired skills for each concept.
- Develop habit of researching unfamiliar concepts through python forums and other sources.





Takeaways

- 1. How to approach the task of developing coding skills as a novice and as someone who hasn't exercised their qualitative lens as often.
- 2. Coding Analysis how to take a step back when approaching a problem to first look at the *what?*, *why?* and how?
- 3. Learned how to prioritize which skills would provide a strong foundation from which I could continue to build my knowledge and experience level
- 4. Personal development insights on topics such as career transitioning, balancing family, work and goals, negotiating and proactively asking for help.

Next Steps: Road to Becoming a Data Scientist

- Run through another basic Python course:
 - Refine my quantitative skills
 - Engrain the foundational Python concepts
 - Exposure to more python skill-based problem sets
- Begin to discuss and conduct research on Data:
 - Collection method
 - Mining methods
 - Analysis & Communicating methods
 - Output in terms of action item
- Outline or map-out the concept of building a product and or website that aims to link first-generation college students to professional development opportunities and mentors based on data provided by them on their interests, academic-behavior and identity performance.
- Explore how data collection that deals more with economic, political and socio-cultural behavior can be analyzed to improve current federal programs, initiatives and future legislative decisions.

