



Introduction to Data Science: Wrapup

Héctor Corrada Bravo

University of Maryland, College Park, USA

CMSC320: 2020-05-10

At UMD

- Next courses (dive deeper): Machine Learning (422) Databases (424)
- Other relevant courses:
 - Computational Methods (460, for optimization)
 - Bioinformatics (423, application of things we saw in class)
 - HCI (434, communication and interaction)
 - CMSC 498O: Selected Topics in Computer Science; Introduction to Data Visualization Advanced Undergraduate Course (Prof. Leilani Battle)

At UMD

There is a Data Science specialization that include these and other courses:

<http://undergrad.cs.umd.edu/degree-requirements-cs-major>

At UMD

Start thinking of research opportunities

- If you plan on going to grad school, it makes a big difference in applications
- If you don't plan on going to grad school, it gives you experience thinking about data-centric problems and applications

For data science, in general, it is important to show qualification academically, and productively.

Have a portfolio! Github can be very useful.

Outside UMD

Get busy!

- Kaggle competitions: <https://www.kaggle.com/>
- Get involved in open source projects. If there was something you wished existed while doing class work, build it!
- Join the local DS community: <http://www.datacommunitydc.org/>

Outside UMD

Learn new things

- Python has a lot of useful stuff for data science
<http://www.amazon.com/Python-Data-Analysis-Wrangling-IPython/dp/1449319793>
- Tutorials on Kaggle are pretty good, their *kernels* area is fun to look at: <https://www.kaggle.com/kernels>
- Hector's Data Science corner:
http://www.hcbravo.org/IntroDataSci/datasci_corner/
- Many resources available online

Outside UMD

Stay informed

- Lots of interesting articles and posts, from many different perspectives: <https://www.oreilly.com/topics/data>
- There's even podcasts!:
 - [Data Skeptic](#)
 - [Data Stories](#)
 - [Talking Machines](#)
 - [Not so standard deviations](#)
 - [More](#)

Outside UMD

Remember, Data Science affords opportunities beyond the mathematical and the technical.

These are skills that can make significant impact outside the technical realm: journalism, health, civics, etc.

E.g., <https://medium.com/@dpatil>

Think about what motivates **you** first, and then figure out how to dive in.