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

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.
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.