## Making the jump from data analyst to data scientist

Mary Newhauser

#### **Overview**

Today's data scientist

How I went from data analyst to data scientist

Teaching yourself data science

#### **About me**

Data Scientist, Intelligent Solutions Team, Wiley-VCH

Hired January 2019

Making the academic publishing process smarter

Lots of NLP on article abstracts

Building a graph database





## Today's data scientist

Many data scientists are new to the field.

Most data scientists are self-taught.

Men make up the majority of data scientists.

Data scientists tend to be very well educated.

#### kaggle

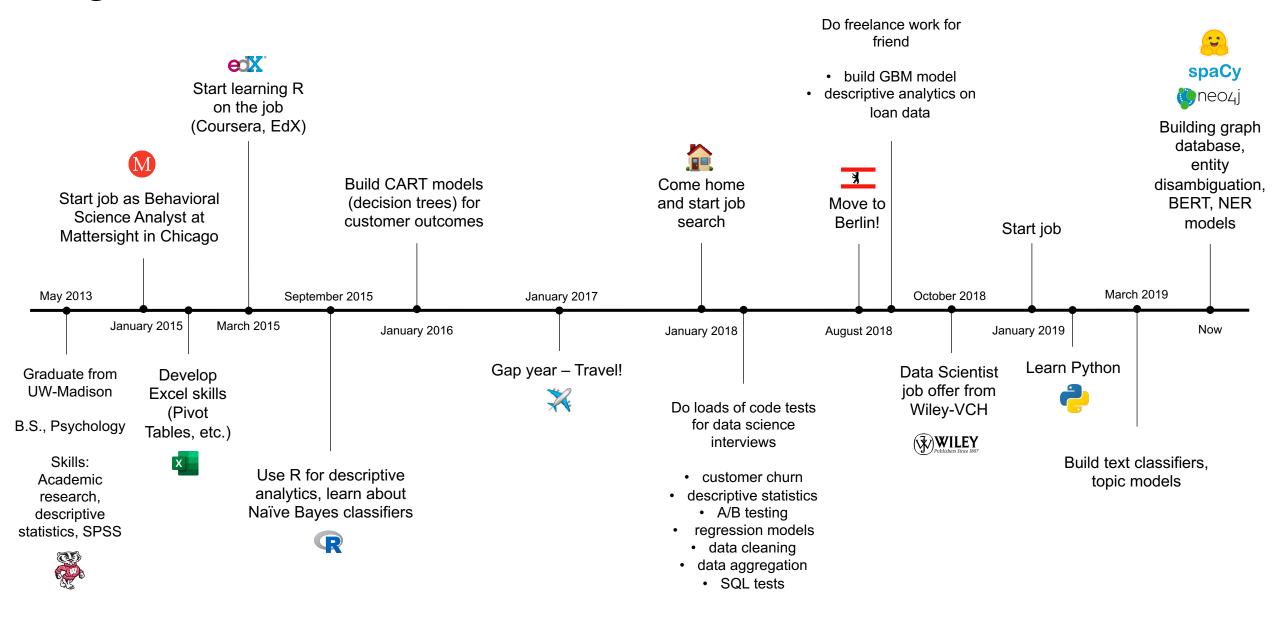
#### Kaggle's State of Data Science and Machine Learning 2019

**Enterprise Executive Summary** 



# How I went from data analyst to data scientist

### My timeline



## My top tips

#### **FAKE IT TILL YOU MAKE IT**

Be overconfident

Search for opportunities in your current company

Apply to a range of position levels

Build up a modest 'portfolio'

Know how to explain your code







## Teaching yourself data science

#### Teaching yourself data science

- Start simple machine learning Recommend Python Something you're projects (but R works too) interested in Replicate online Practice cleaning real · Example: mining tutorials world data tweets Descriptive statistics
  - Regression models
  - Topic models

Coding basics

Create your own project

#### Find a professional project

- Freelance/side hustle
- Ask to work on a project with your current company's data team

- Unsupervised learning
- Transfer learning
- Network analysis
- Recommendation engines

Advanced models & techniques

### Python & data science resources

<u>Code Academy</u> – Interactive online courses (free, paid option)

Learnpython.org - Similar to Data Camp but no videos (free)

EdX – Free online courses with great practice projects (free)

<u>Data Camp</u> – Awesome video courses (mostly paid)

Sentdex YouTube channel – Great video tutorials (1,000+)

## Thanks for listening!

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