

DATA SCIENCE

INTRO TO DATA SCIENCE

I. WHAT IS A DATA SCIENTIST?

II. DATA SCIENCE WORKFLOW

INTRO TO DATA SCIENCE

I. WHAT IS A DATA SCIENTIST?

WHAT IS A DATA SCIENTIST?

4



Zvi
@nivertech



Follow

"Data Scientist" is a Data Analyst who lives in California.

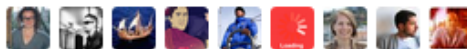
Reply Retweet Favorite More

RETWEETS

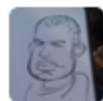
140

FAVORITES

40



9:55 PM - 14 Mar 2012



Josh Wills

@josh_wills



Follow

Data Scientist (n.): Person who is better at statistics than any software engineer and better at software engineering than any statistician.



Reply



Retweet



Favorite



More

RETWEETS

907

FAVORITES

418



12:55 PM - 3 May 2012



Javier Nogales

@fjnogales



Follow

Data Scientist (2/2): person who is worse at statistics than any statistician and worse at software engineering than any software engineer



RETWEET

1

FAVORITES

5



9:08 AM - 27 Jan 2014

WHAT IS YOUR DEFINITION?

“Data Scientists are people with some mix of **coding and statistical skills** who work on **making data useful** in various ways.”

Data Scientist Type A (for Analysis):

- Primarily concerned with **making sense of data** or working with it in a fairly **static** way.
- Similar to a statistician, but knows all the **practical details of working with data** that aren't taught in statistics: data cleaning, dealing with large data sets, visualization, domain knowledge, etc.

“Data Scientists are people with some mix of **coding and statistical skills** who work on **making data useful** in various ways.”

Data Scientist Type B (for Building):

- Some statistical background, but **strong coder or software engineer**.
- Primarily concerned with **using data “in production”**: building models which interact with users (by giving recommendations, for example).

Our course is focused primarily on **Type A**.

Hadley Wickham's advice for becoming a data scientist:

Statistical knowledge

“I think you need some knowledge of specific statistical/machine learning techniques, but a deep theoretical understanding is not that important. You need to understand the strengths and weaknesses of each technique... The vast majority of data science problems can be solved by a creative assembly of off-the-shelf techniques, and don't require new theory.”

Hadley Wickham's advice for becoming a data scientist:

Programming skills

“You need to be fluent with either R or Python. There are other options, but none of them have the community that R and Python have, which means you'll need to spend a lot of time reinventing tools that already exist elsewhere.”

Hadley Wickham's advice for becoming a data scientist:

Domain knowledge

“...A data scientist should be able to contribute meaningfully to any project, even if you're not intimately familiar with the specifics. I think this means you should be generally well read... and an able communicator. A good data scientist will help the real domain experts refine and frame their questions in a helpful way. Unfortunately I don't know of any good resources for learning how to ask questions.”

II. DATA SCIENCE WORKFLOW

