

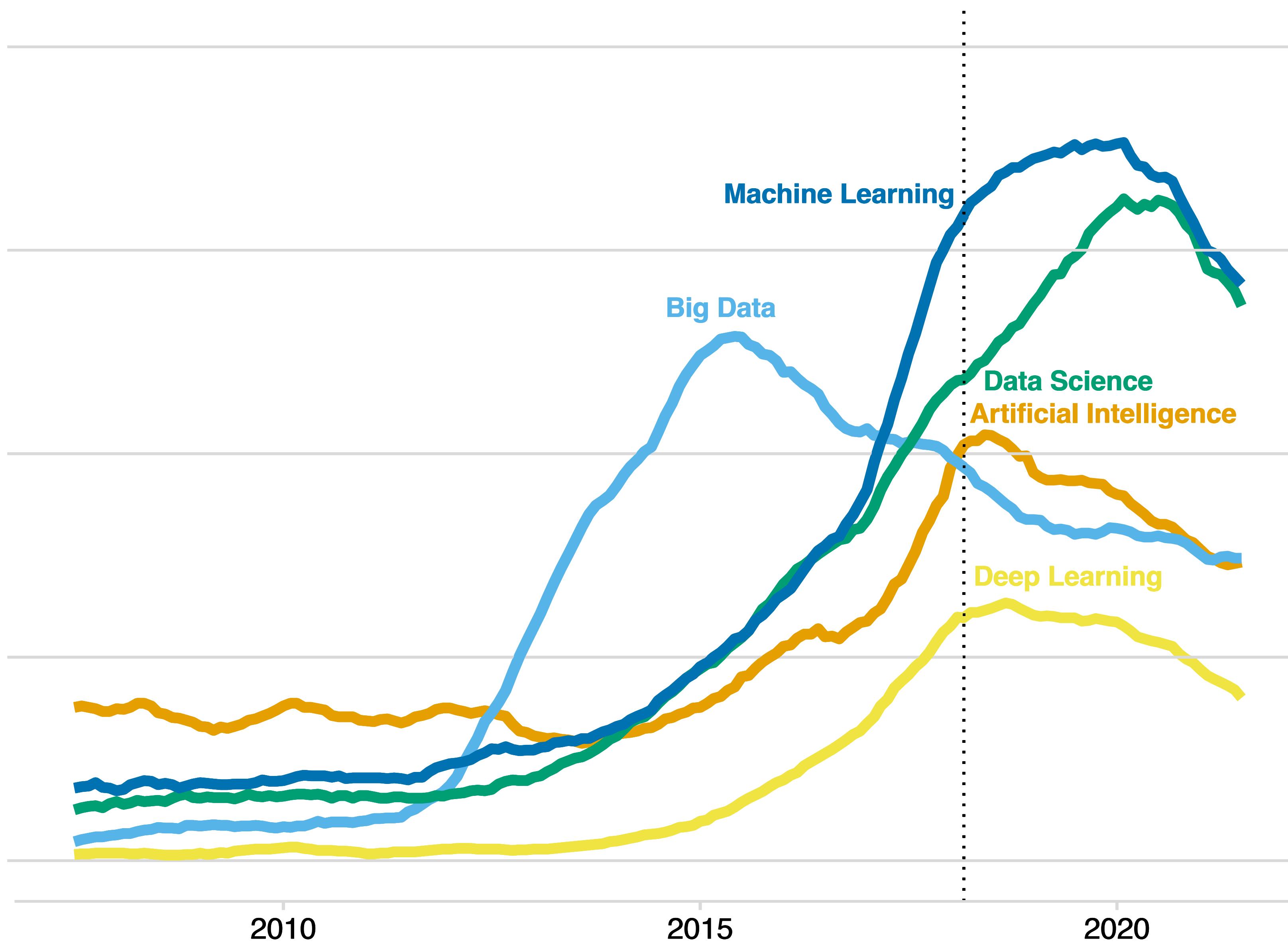
# Building a Career in Data Science



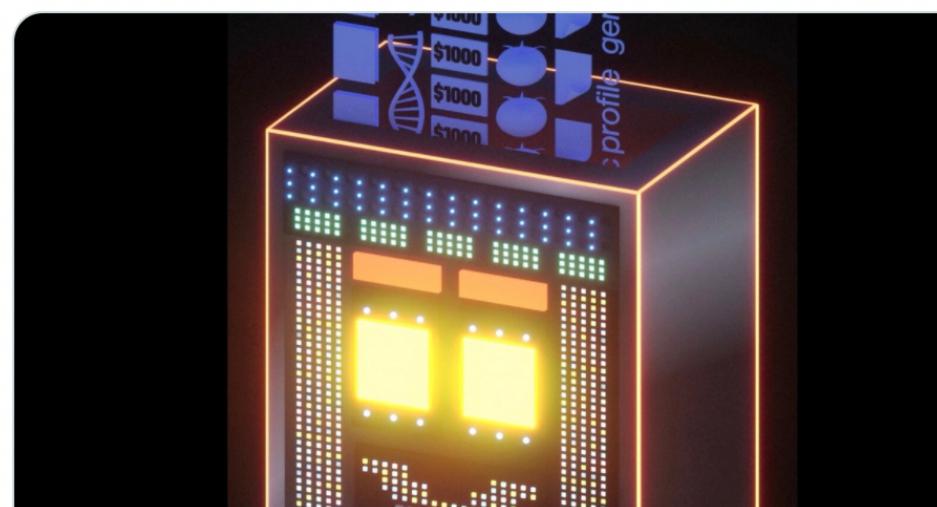
Ryan Wesslen | [ryanwesslen.com](http://ryanwesslen.com) | October 5, 2021

[bit.ly/ryan-datascience-asu](https://bit.ly/ryan-datascience-asu)

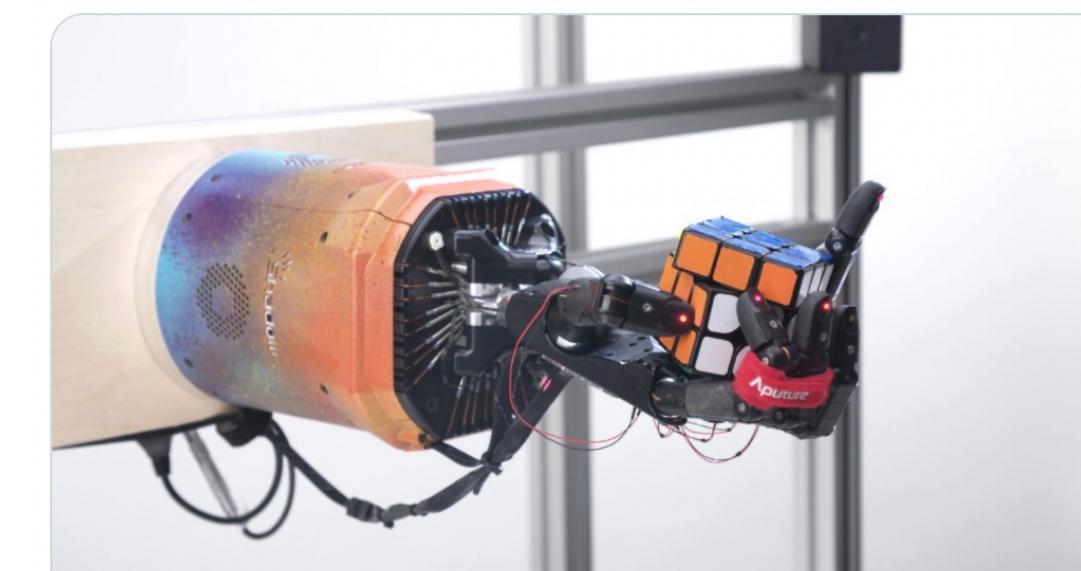
# Google Trends 12 Month Moving Average



The New York Times @nytimes · Jul 16  
IBM's Watson was supposed to transform industries and generate riches for the company. Neither has panned out. Today, it stands out as a sobering example of the pitfalls of hype and hubris around AI.



What Ever Happened to IBM's Watson?  
IBM's artificial intelligence was supposed to transform industries and generate riches for the company. Neither has panned out. Now, IB...  
🔗 nytimes.com



OpenAI disbands its robotics research team  
OpenAI has disbanded its robotics team in what might be a reflection of economic and commercial realities.  
🔗 venturebeat.com

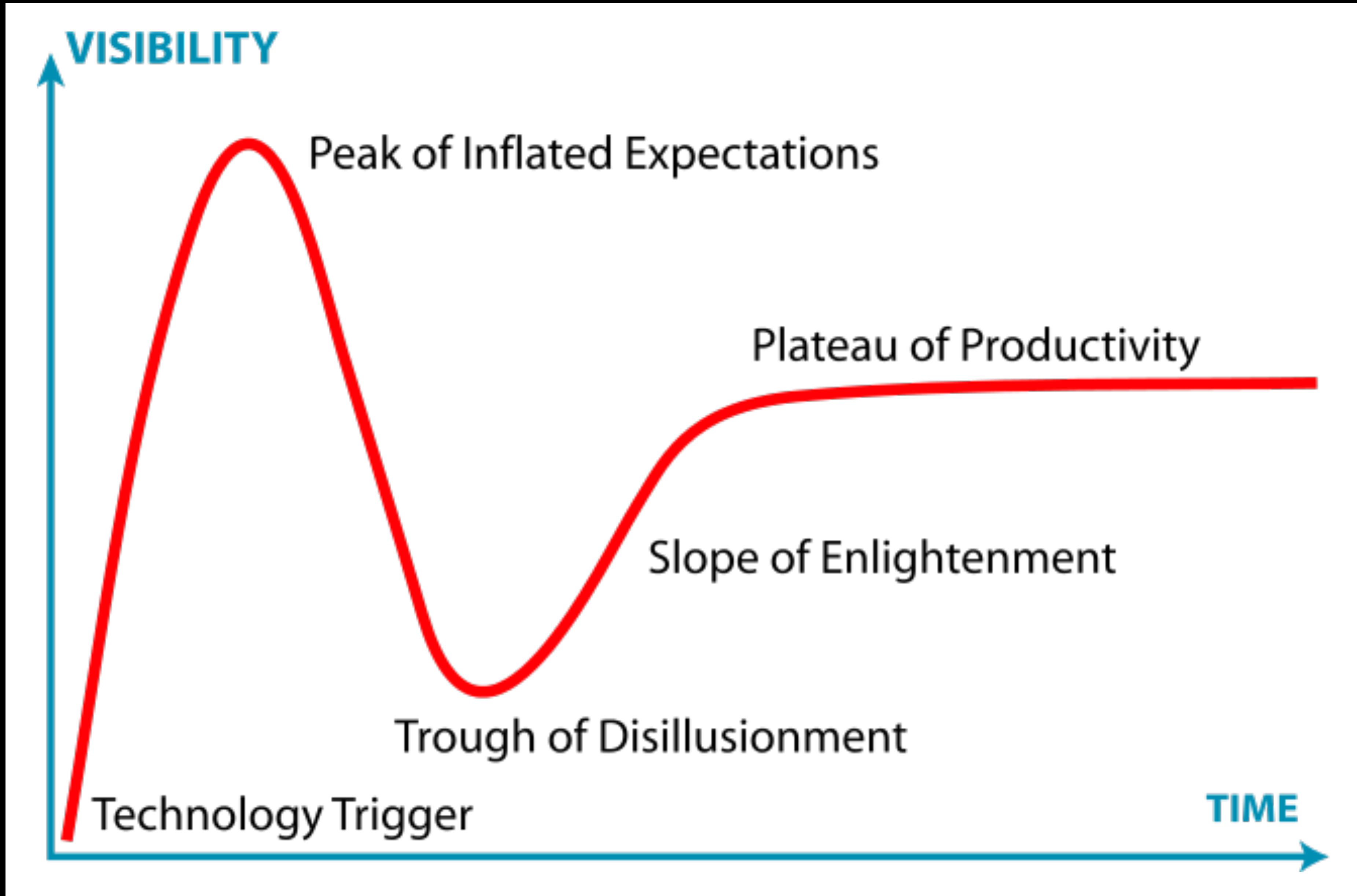


MIT Technology Review @techreview · Jul 18  
Artificial intelligence is already creating real harm, just not in the ways most people would expect. The good news is the fight back has begun.



The true dangers of AI are closer than we think  
Forget superintelligent AI: algorithms are already creating real harm. The good news: the fight back has begun.  
🔗 technologyreview.com

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Source: Jeremy Kemp (via Dustin Arendt)  
[https://commons.wikimedia.org/wiki/File:Gartner\\_Hype\\_Cycle.svg](https://commons.wikimedia.org/wiki/File:Gartner_Hype_Cycle.svg)

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# The best resource for building a career in data science (IMHO)

## PART 1: GETTING STARTED WITH DATA SCIENCE

- 1 WHAT IS DATA SCIENCE? ▶
- 2 DATA SCIENCE COMPANIES ▶
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- 4 BUILDING A PORTFOLIO ▶

## PART 2: FINDING YOUR DATA SCIENCE JOB

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- 16 MOVING UP THE LADDER ▶

# BUILD A CAREER IN Data Science

Emily Robinson

Jacqueline Nolis



 MANNING

bestbook.cool

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# Agenda

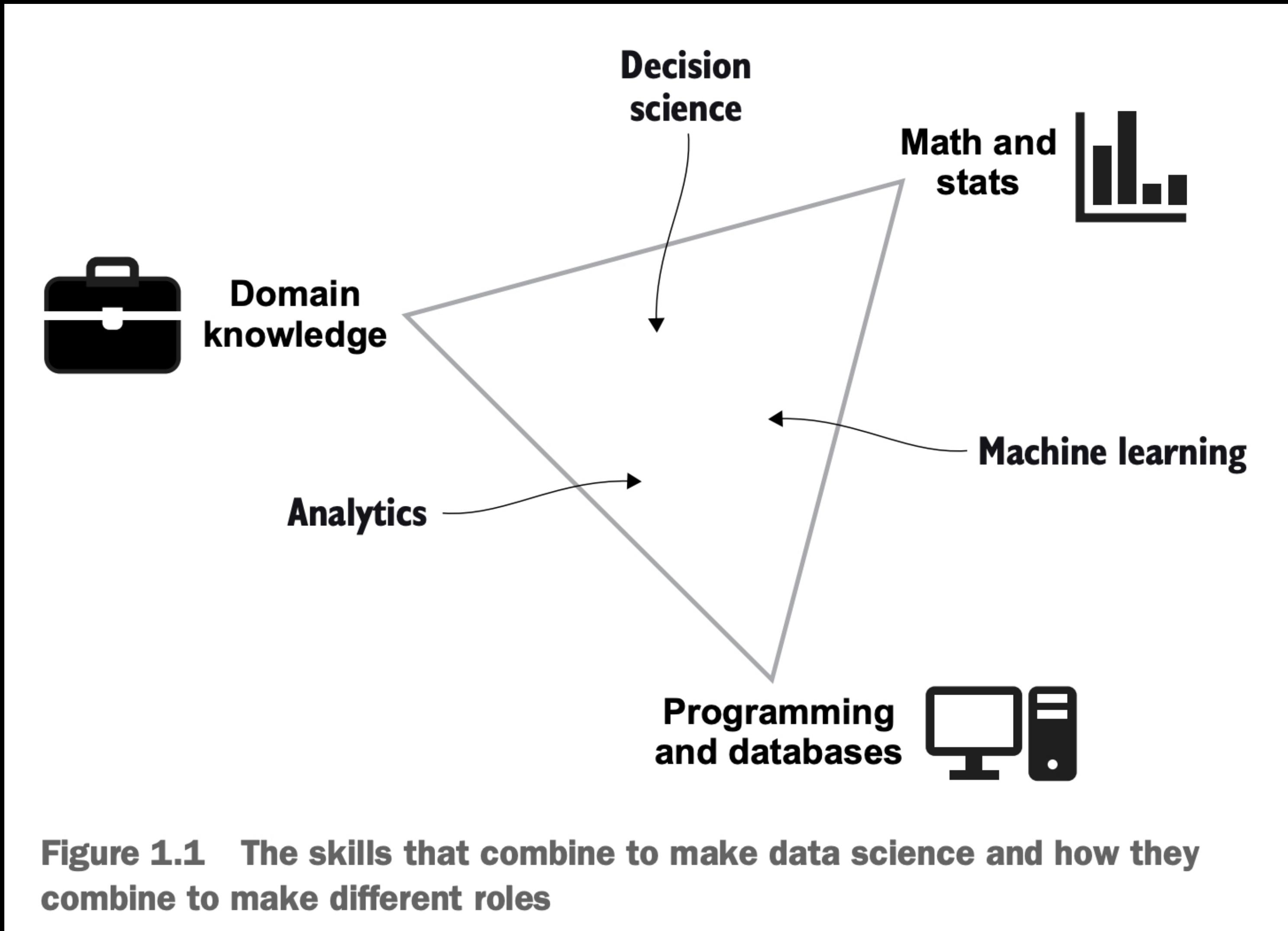
1. What is data science?
2. What skills do data scientists need?
3. How to find, settle, and grow a career in data science

# What is Data Science?

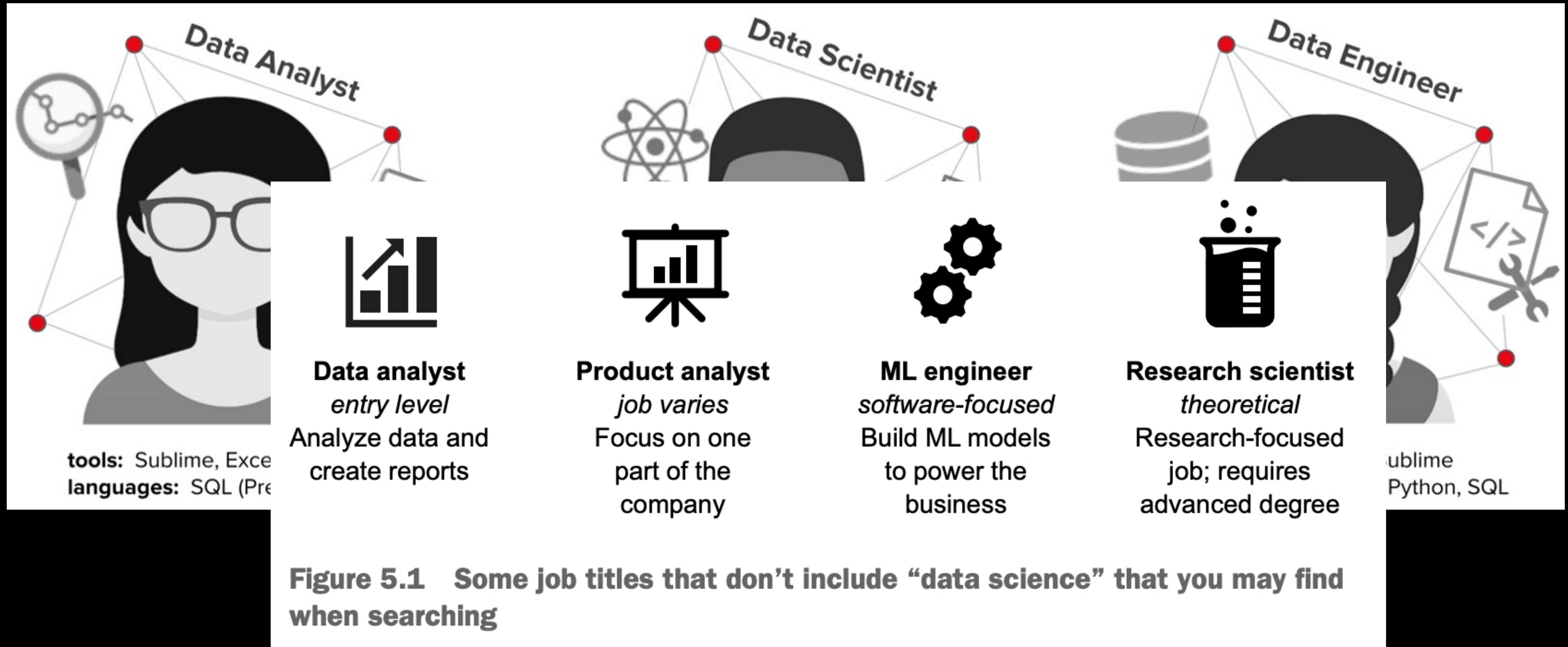


Source: Gabriela de Quierez [bit.ly/dsc-europe-2020](http://bit.ly/dsc-europe-2020)

# What is Data Science?

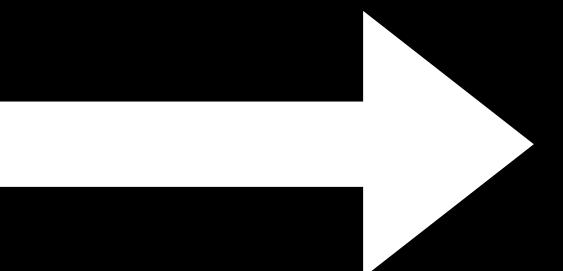


# Job Paths



# Can anyone become a data scientist?

Three important trends in data science

- Data science has moved through the early stages of the hype cycle
  - There is an oversupply of new data scientists
  - Shift in the way data science titles are distributed
- 



Vicki Boykis @vboykis

- Job market for junior data scientists is very competitive/crowded.
- May be applying for jobs not truly reflective of data science

# Acquiring data science skills



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# How to get the skills

- Earning a graduate degree in data science or a related field
- Participating in a data science bootcamp (e.g., 8-15 week crash course)
- Doing data science work in your current job
- Teaching yourself thru online courses and data science books

# What is the most important skill for a data scientist?

Learn how to learn



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# Chicken vs egg problem: getting first data scientist job

Experience

Job as data scientist

# Build your portfolio



## Advice to aspiring data scientists: start a blog

Last week I shared a thought on Twitter:

 **David Robinson**  
@drob 

When you've written the same code 3 times, write a function

When you've given the same in-person advice 3 times, write a blog post

9:22 PM · Nov 8, 2017 

 4.2K  46  Copy link to Tweet

[Tweet your reply](#)

Ironically, this tweet hints at a piece of advice I've given at least 3 *dozen* times, but haven't yet written a post about. I've given this advice to almost every aspiring data scientist who asked me what they should do to find a job: **start a blog, and write about data science.**<sup>1</sup>

<http://varianceexplained.org/r/start-blog/>

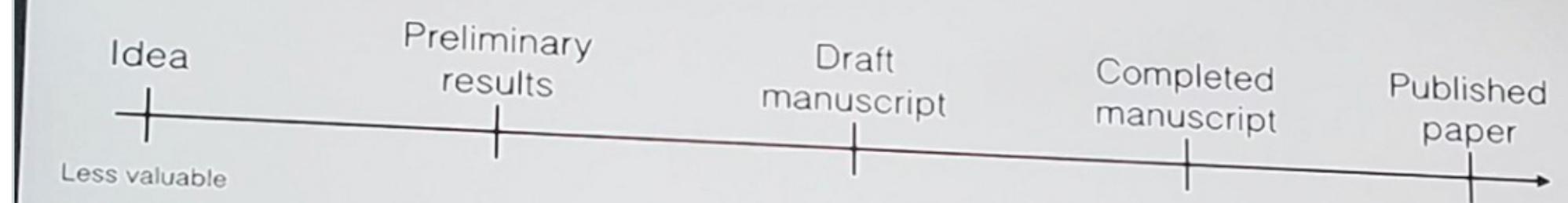


**Amelia McNamara**  
@AmeliaMN 

"Things that are still on your computer are approximately useless." -[@drob #eUSR #eUSR2017](#)

Webcams Zoom: 42% Screenshot

**How I thought of my goals in grad school:**



Idea Preliminary results Draft manuscript Completed manuscript Published paper  
Less valuable More valuable

**How I should have been thinking of them:**



Anything still on your computer (Data, code, results, draft, finished paper)  
Anything out in the world (Paper, preprint, product, blog post, open source, tweet)  
Less valuable More valuable

2:00 PM · Nov 3, 2017 · Twitter for Android

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Vincent D. Warmerdam

@fishnets88

...

Announcement! The guy behind \*that recruiter pokemon meme\* will be delivering a keynote at a technical recruitment conference!

If you're interested in the story behind this photo you can find more info here: [talent42.com/home](https://talent42.com/home)

my linkedin profile

R, python, javascript, shiny, dplyr, purrr, ditto, ggplot, d3, canvas, spark, sawk, pyspark, sparklyR, lodash, lazy, bootstrap, jupyter, vulpix, git, flask, numpy, pandas, feebas, scikit, pgm, bayes, h2o.ai, sparkling-water, tensorflow, keras, onyx, ekans, hadoop, scala, unity, metapod, gc, c#/c++, krebbase, neo4j, hadoop.

I typically ask recruiters to point out which of these are pokemon.

5:21 AM · Oct 16, 2020 · Twitter Web App

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Start

Exploratory analysis

Model development

API development

Code review

Unit test creation

Load testing

Deploying to production

Figure 11.1 Example process of creating a production machine learning product



<https://calmcode.io>

## Code. Simply. Clearly. Calmly.

Video tutorials for modern ideas and open source tools.

We currently host 592 short videos in 79 courses.

New content is announced via a [newsletter](#).

See what people have [said about us](#).

Made by people who want to remedy the skill anxiety.

Short and simple video lessons that start from scratch.

Tools and thoughts that might make your professional life more enjoyable.

<https://learning.rasa.com>



## Understanding Rasa Deployments

Understand the underlying technology behind a Rasa deployment. Includes Kubernetes, Docker and Helm.

### Beginner Python Content



args kwargs  
Function Arguments



comprehensions  
Awesome One-Liners



lambda  
Expressive Functions

### Tools that Check Python Code



black  
Format Your Code



flake8  
Check Your Style



pre-commit  
Prevent Bad Commits



pytest  
Intro to Testing

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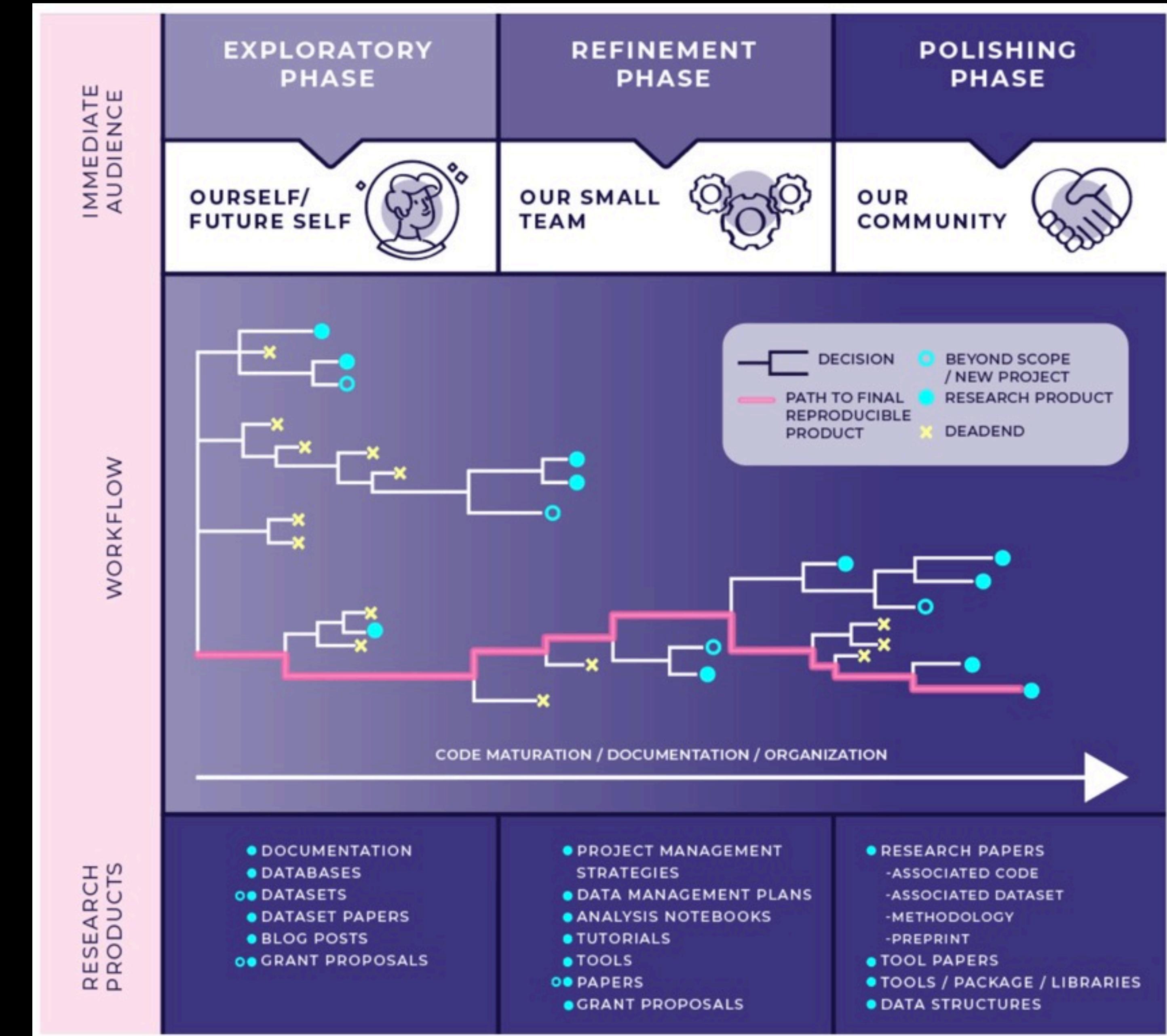
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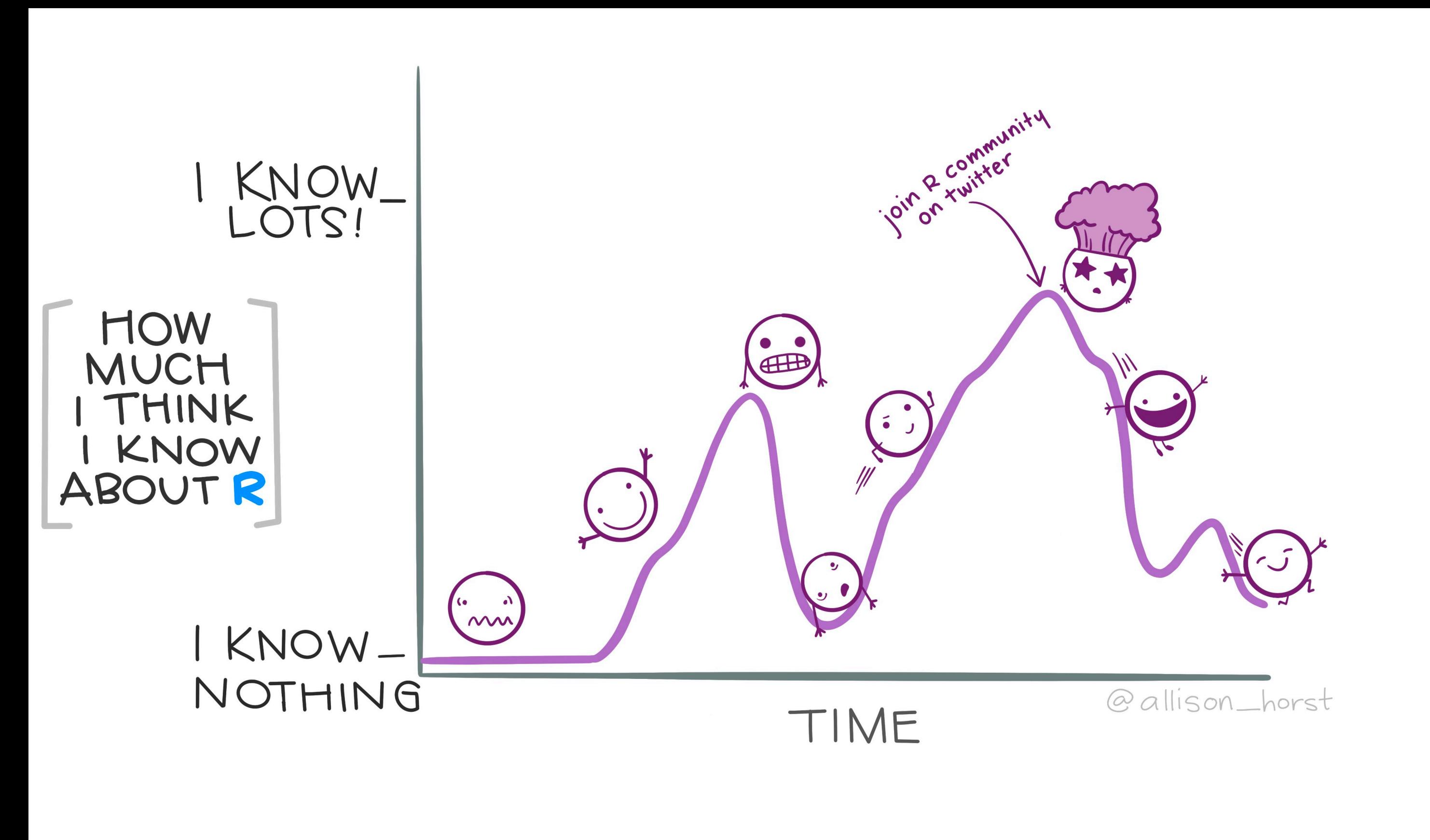
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#rstats on Twitter



AI Inclusive



R-Ladies  
rladies.org

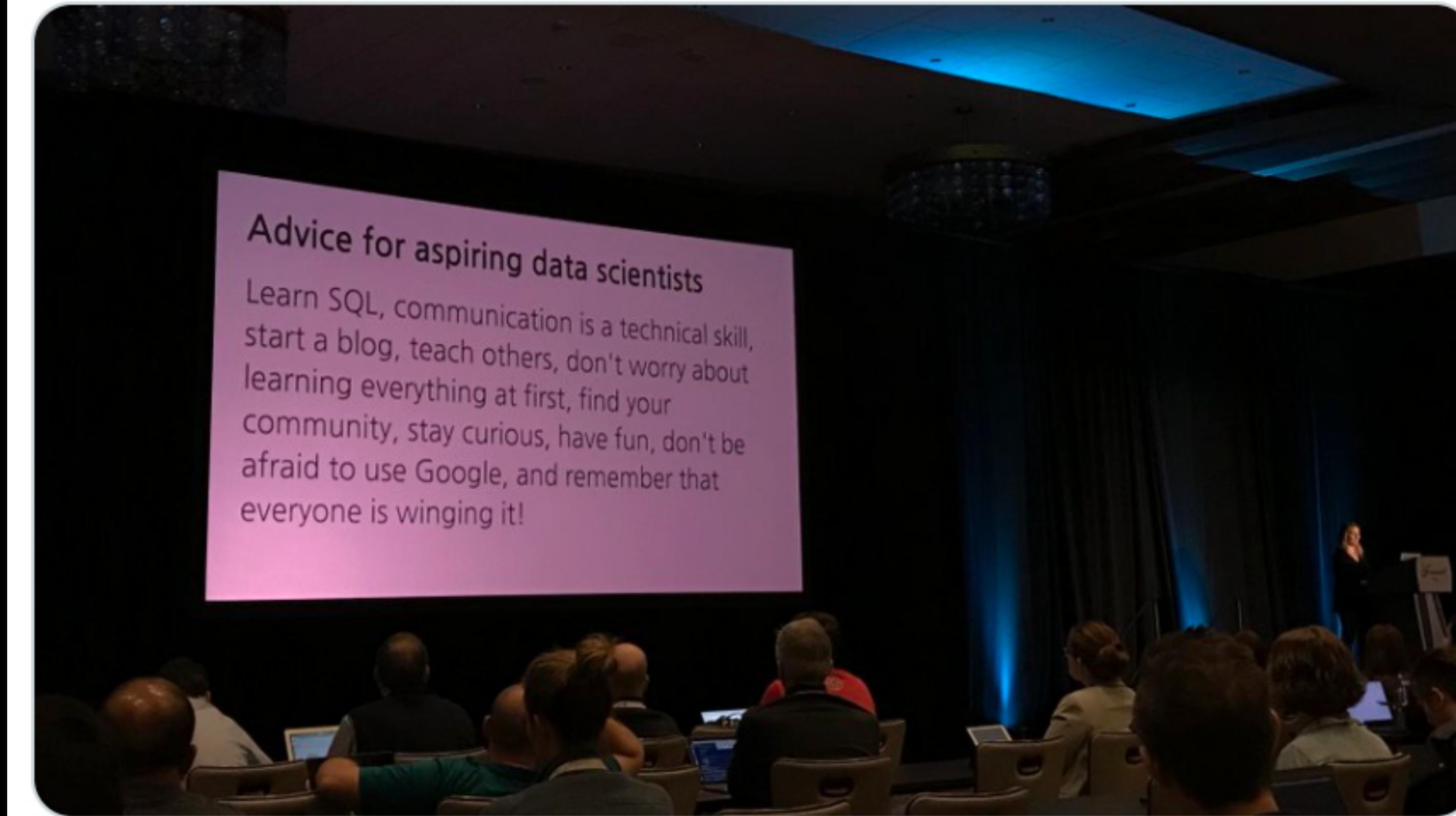
# Final thoughts



Julia Silge  
@juliasilge

...

Closing out this #rstudioconf talk with ~~100~~ advice for aspiring data scientists!



👤 Caitlin Hudon 🤖

2:22 PM · Jan 18, 2019 · Twitter Web Client

Just a handful of amazing data science leaders to follow  
(whose resources I used for this talk)

# Thank you!

## Questions



@ryanwesslen  
[ryanwesslen.com](http://ryanwesslen.com)

	<b>Twitter</b>	<b>Website</b>
Emily Robinson	@robinson_es	<a href="http://hookedondata.org">hookedondata.org</a>
Jacqueline Solis	@skyetetra	<a href="http://jnolis.com">jnolis.com</a>
Vincent Warmerdam	@fishnets88	<a href="http://koaning.io">koaning.io</a>
Vicki Boykis	@vboykis	<a href="http://vickiboykis.com">vickiboykis.com</a>
Gabriela de Quierez	@gdequeiroz	<a href="http://k-roz.com">k-roz.com</a>
David Robinson	@drob	<a href="http://varianceexplained.org">varianceexplained.org</a>
Caitlin Hudon	@beeonaposy	<a href="http://caitlinhudon.com">caitlinhudon.com</a>
Allison Horst	@allison_horst	<a href="http://allisonhorst.com">allisonhorst.com</a>
Julia Silge	@juliasilge	<a href="http://juliasilge.com">juliasilge.com</a>