Data Science for Scientists

Planning your Data Science career

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Should you leave academia and go work as a Data Scientist?

Similarities

- Delve deeply into hard problems
- Flexibility
- Collaborative working

Differences

- Compensation and work-life balance
- Pace and timetable
- Goals

How do you do it?

- Define your path
- Get up to speed
- Find a company
- Crack the interview

Defining your path

Defining your path

Data Analyst

- Understands the business
- Values automation

Software Engineer

- Understands the tech
- Knows automation

Getting up to speed

Getting up to speed

There’s no royal road

1. Code
2. Get frustrated
3. Push through to a working solution

Learning options

Higher Ed

‘Traditional’ degrees

- Lots of theory
- Take a while to catch up
- More recognition?

Up-skilling

Bootcamps, MOOCs, …

- Mostly hands-on
- Adapt faster
- ‘Show your skills’

Writing a good CV

Demonstrate that you are proactive and
willing to **constantly teach yourself something new**

- Completed side projects
- FOSS contributions
- Conferences and hackathons

Finding a company

We're looking for unicorns to join our team.

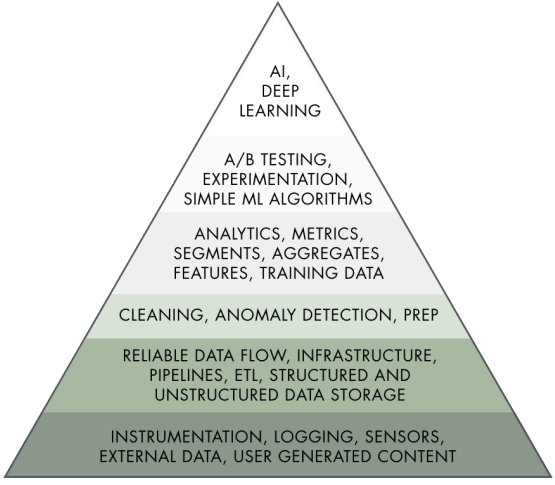
Come meet us at …!

Finding a company

Look for companies that…

- Don’t try to run before they can walk
- Have a Data Science culture
- Respect your professionalism

Don’t try to run before you can walk



From M. Rogati

Data Science culture

Good companies **embed** Data Science in their processes

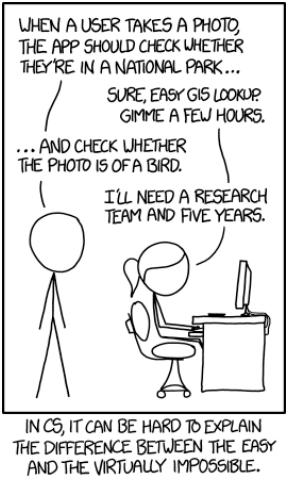
- Build, don’t buy
- Cultivate internally, don’t outsource
- Humans in the loop

Data Science culture

Good companies **embed** Data Science in their processes

1. Numeracy
2. Culture
3. Adoption

Numeracy



From xkcd

Culture

The ROI of Data Science projects
is very difficult to predict!

- Power law-like distribution of returns
- Failure is **always** an option

Culture

Good companies embrace a
high-risk, high-reward innovation culture

- Iterate quickly $\rightarrow$ fail fast
- Operationalise

Adoption

If it’s not used in production…

Adoption

If it’s not used in production…

It never happened!

Professionalism

Good companies…

- Hire for potential
- Let you choose your tools
- Give you the resources you need
- Nurture your curiosity

Cracking the interview

Typical interview process

1. Initial contact
2. Screening (often remotely)
3. Technical interview (often on-site)

Screening

Remember that you're screening them as well!

- Phone screen
- Coding exercise

Technical interview

- Be strong in the basics
- Don’t use too much jargon
- Don’t beat around the bush… it’s OK not to know!

A good company…

- Embeds Data Science in its processes
- Has a roadmap
- Doesn’t look for unicorns