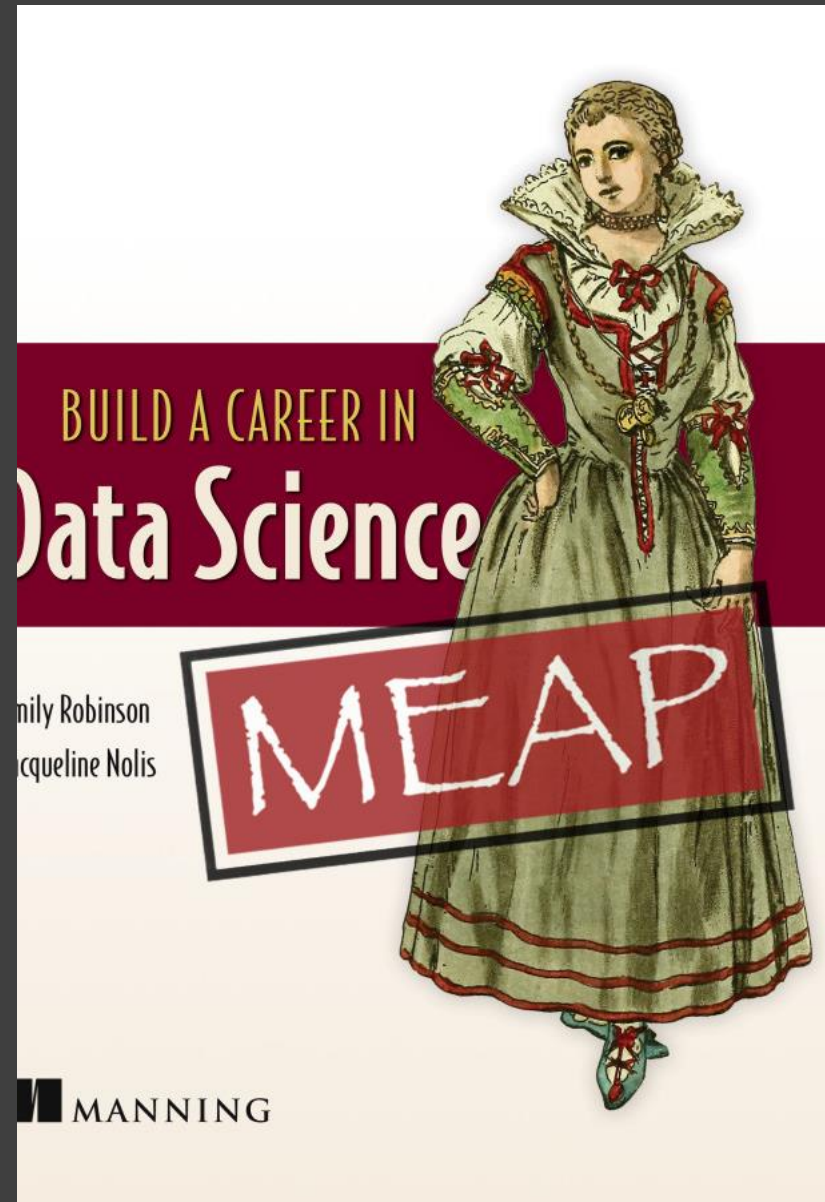




The Interview Process

Ch7 is really
good



Interview Process



1. Phone interview



2. In-person interview



3. Case study



4. Leadership interview & offer

Phone Screening Advice from:



Data Science Renee

@BecomingDataSci

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📍 Harrisonburg, VA 🔗 [becomingadatascientist.com](#) 📅 Joined February 2014

Phone Screen Advice: Audience

Since it's over the phone, you have to explain these things *verbally* and *succinctly*, so it's good to practice explaining your resume and work to different types of people who might be calling you:

For example:

- someone very technical who wants to assess your skill level
- someone in management who wants to get a feel for how you explain your work to someone who isn't a data scientist
- a potential teammate who wants to get a sense of what you might be like to work with

Note: this takes place after your resume has "made the cut" and the employer wants to find out more about you.



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@BecomingDataSci

Phone Screen Advice: Brevity

You have a short amount of time to

- clarify things on your resume
- demonstrate your work
- communicate your process and challenges and results

Goal: I want to better understand what you meant, or see how you actually talk about what you've done.

Note: It might sound like these questions require long explanations. Sometimes the interviewer does want depth, but also be aware of the limited time, especially for a screening call.

- It's ok to pause and ask, "Do you want me to continue and explain more?"
- That gives them a chance to either cue you to continue, and possibly direct your response to a particular drill-down topic, or move on to another question they want answered.



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Phone Screen Advice: Topics

"That's listed on my resume" is always a bad response.

- I want to hear you talk about it! How and why - get a sense of your comfort level w/them.

Academic projects are OK to talk about, but make sure you can talk about more than the assignment and the outcome.

I want to know:

- that you've come across problems you'll experience on the job, and overcame them
- what role you played if it was a group project
- how you decided what question to answer, and what approach to take
- if you tried different tools or techniques, or had to learn something
- why you were working on it, and what business value you provided.



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Phone Screen Advice: style

Make sure you can put your work in context, and not just talk about it like a calculator.

For example,

- if you're talking about having built a dashboard in Tableau, talk about what was the purpose of the dashboard, who the target user was, how you figured out what data to use, why you made the data viz design choices you did, how it was used, how you improved it.

This shows that you did your work thoughtfully, and added value beyond "completing a task you were assigned".

It also shows you were engaged - showing some enthusiasm for the work you did and the work you're applying to do is important



Data Science Renee

@BecomingDataSci

- I think a lot of the advice here boils down to being able to put yourself in the shoes of the interviewer. Depending on the company, you could be being screened by someone in HR, someone in management, or a team member.
- There can sometimes be a LOT of resumes/calls to get through, and the person might be doing it on top of their normal job. It's unlikely the only thing they have to do that day is sit down with a stack of resumes and call people.
- And with the nature of the field of data science (and sometimes-bad job postings), it can be hard to sift through and find someone who is an ideal match for the job.
- Your job in the phone screening is to:
 - -ensure them you can do what's in the job posting
 - -ensure them you can do what's on your resume
 - -provide enough "signal" for them to get a sense of your experience during a short call, among many other calls
 - -give a sense of your potential
- I think I gained experience in this area during a past job in sales (yep, I sold Cutco knives!).
- In sales, you learn how to do things like:
 - -address possible objections before they come up
 - -demonstrate how what you're selling matches their need
 - -get to the point while also being interesting enough to keep their attention (which involves "reading the room")

Activity

Explain a recent project 3 different ways, 60 seconds each:

- someone very technical who wants to assess your skill level
- someone in management who wants to get a feel for how you explain your work to someone who isn't a data scientist
- a potential teammate who wants to get a sense of what you might be like to work with



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Interview Process



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In-Person

- What to wear & bring, when to show up
- Multiple people, with different goals
- Usually a tour, sometimes a meal



What is the goal?

In-Person Example Structure

1. Introduction
2. Question about recent project candidate worked on
3. Easy Technical Question
4. Hard Technical Question
5. *Do you have any questions?*

1. Introduction

The *introduction* phase of the interview is intended to put the candidate at ease.

- I ask them if they had a nice flight.
- I spend about 30 seconds telling the person who I am and how the interview will work.
- I always reassure candidates that we are interested in *how* they go about solving problems, not the actual answer.

2. Project

Examples: senior thesis, class project, previous job / internship, or even “what class did you take last semester that you liked the most? It doesn’t have to be computer-related.”

My approach: ask open-ended questions and sit back and listen, with only the occasional “tell me more about that” if they seem to stall.

What I look for:

- Passion.
 - Smart people are passionate about the projects they work on. They get very excited talking about the subject. They talk quickly, and get animated.
 - Being passionately *negative* can be just as good a sign. “My last boss wanted to do everything on VAX computers because it was all he understood. What a dope!”
 - A really good sign that a candidate is passionate about something is that when they are talking about it, they will forget for a moment that they are in an interview.
 - You can challenge them on something (try it—wait for them to say something that’s probably true and say “that couldn’t be true”) and they will defend themselves, even if they were nervous five minutes ago, because they care so much they forget that you are going to be making Major Decisions About Their Life soon.
- Explaining things well at multiple levels
 - I have rejected candidates because when they talked about their previous project, they couldn’t explain it in terms that a normal person could understand.
 - Often CS majors will just assume that everyone knows what Bates Theorem is or what $O(\log n)$ means.
 - If they start doing this, stop them for a minute and say, “could you do me a favor, just for the sake of the exercise, could you please explain this in terms an eight year old could understand.” At this point many people will *still* continue to use jargon and will completely fail to make themselves understood. *Gong!* You don’t want to hire them, basically, because they are not smart enough to comprehend what it takes to make other people understand their ideas.
- If the project was a team project, look for signs that they took a leadership role
 - A candidate might say, “We were working on X, but the boss said Y and the client said Z.” I’ll ask, “So what did *you* do?”
 - A good answer to this might be “I got together with the other members of the team and wrote a proposal...” A bad answer might be, “Well, there was nothing I *could* do. It was an impossible situation.”
 - The only way you’re going to be able to tell if somebody *Gets Things Done* is to see if historically they have tended to get things done in the past. In fact, you can even ask them directly to give you an example from their recent past when they took a leadership role and got something done—overcoming some institutional inertia, for example.

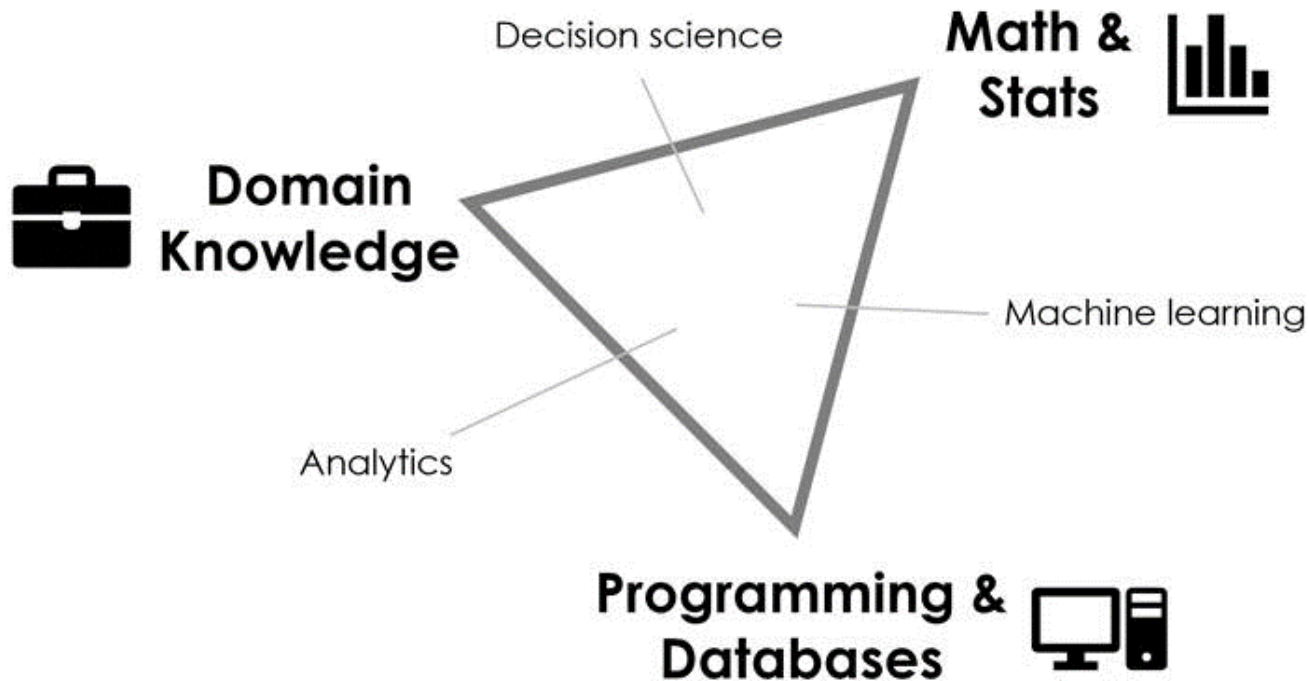
Exercise: Passion

- *Spend two minutes, and come up with one or two things that get you excited.*

Possibly helpful prompts:

- Think about topics where you think that people who disagree with you aren't just wrong, they are stupid or bad.
- Recall times you had trouble sleeping because you were thinking about a thing, or woke up thinking about it.
- Remember times your friends or partners told you to stop talking about a topic

3&4. Technical Questions



Most of the time in the interview, should be spent letting the candidate prove that they can do the job

I usually start with a really easy question and ramp up quickly. The easy question should take anyone good under a minute.

The best answers aren't just right, but also think about impact, completeness, concepts.

When you don't know

- It's totally possible (and normal!) to not know the answer to every question in the interview.
- Try to be upfront about it and explain what you do know about the answer. For instance, if you were asked “what is a semi-join” and you don't know the answer, you could say something like, “I haven't heard of that kind of join before, but I suspect it might be related to an inner-join.”
- Being open about what you don't know is better than confidently being incorrect—interviewers are often wary of people who don't know what they don't know.



1. Nervousness Is Normal. Practice and Prepare!

All people feel some physiological reactions like pounding hearts and trembling hands.

- Do not associate these feelings with the sense that you will perform poorly or make a fool of yourself.
- Some nerves are good. The adrenaline rush that makes you sweat also makes you more alert and ready to give your best performance.

The best way to overcome anxiety is to prepare, prepare, and prepare some more.

- Take the time to go over your notes several times.
- Once you have become comfortable with the material, practice—a lot.
- Videotape yourself, or get a friend to critique your performance.

2. Know Your Audience. Your Speech Is About Them, Not You.

- Before you begin to craft your message, consider who the message is intended for.
- Learn as much about your listeners as you can.
- This will help you determine your choice of words, level of information, organization pattern, and motivational statement.

3. Organize Your Material in the Most Effective Manner to Attain Your Purpose.

- Create the framework for your speech.
- Write down the topic, general purpose, specific purpose, central idea, and main points.
- Make sure to grab the audience's attention in the first 30 seconds.

4. Watch for Feedback and Adapt to It.

- Keep the focus on the audience.
- Gauge their reactions, adjust your message, and stay flexible.
- Delivering a canned speech will guarantee that you lose the attention of or confuse even the most devoted listeners.

5. Let Your Personality Come Through.

- Be yourself, don't become a talking head—in any type of communication.
- You will establish better credibility if your personality shines through, and your audience will trust what you have to say if they can see you as a real person

6. Use Humor, Tell Stories, and Use Effective Language.

- Inject a funny anecdote in your presentation, and you will certainly grab your audience's attention.
- Audiences generally like a personal touch in a speech. A story can provide that.

7. Don't Read Unless You Have to. Work from an Outline.

- Reading from a script or slide fractures the interpersonal connection.
- By maintaining eye contact with the audience, you keep the focus on yourself and your message.
- A brief outline can serve to jog your memory and keep you on task.

8. Use Your Voice and Hands Effectively. Omit Nervous Gestures.

- Nonverbal communication carries most of the message.
- Good delivery does not call attention to itself, but instead conveys the speaker's ideas clearly and without distraction.

9. Grab Attention at the Beginning, and Close with a Dynamic End.

- Do you enjoy hearing a speech start with “Today I’m going to talk to you about X”? Most people don’t.
- Instead, use a startling statistic, an interesting anecdote, or concise quotation.
- Conclude your speech with a summary and a strong statement that your audience is sure to remember.

10. Use Audiovisual Aids Wisely.

- Too many can break the direct connection to the audience, so use them sparingly.
- They should enhance or clarify your content, or capture and maintain your audience's attention.