**How to Prepare for Big Tech Data Science Interviews**

**Big tech interviews don’t have to be intimidating if you know how to prepare properly**

Arguably, the easy part about preparing for big tech interviews is what you’ve already accomplished: learning the skills required for the job.

Now comes the hard part — preparing for the interview itself.

With a cloud of fascination and allure hanging consistently over big tech companies—think Meta (formerly Facebook), Amazon, Apple, Netflix, Alphabet (formerly Google), and more—it’s no wonder that many up-and-coming data scientists are targeting these companies as their first job in the industry.

However, there is a misconception that big tech interviews are more difficult than the average interview. Most big tech companies tend to have the same interviewing process that changes from year to year as the quality of candidates changes. The difficulty that you hear about comes from these companies simply being more selective than others which leads to high rejection rates.

Therefore, when preparing for these interviews, you don’t need to be concerned about being asked an impossible question (unless the interviewers feel particularly spicy that day). Instead, you must focus on nailing the standard set of questions commonly asked in technical interviews, with a particular focus on how you will stand out from hundreds of very qualified candidates applying for the same position.

**Learn the realities and competitive landscape**

The first stage in the big tech interview preparation process is to have a clear picture in mind of what you will be up against once you enter the interview process.

It can be easy to get distracted by your dreams of working for these companies, including thoughts about free salad bars, onsite gyms, and the ability to bring your dog into the office.

It can also be easy to be overconfident in your abilities when you’ve won a few Kaggle competitions and done some pro-bono work that has benefitted a small business in your area.

However, there are a few things you need to keep in mind so that you can have a good hard look at the realities of the interview process and the competitive landscape you will be entering.

**Data science skills are nothing without real-world problem-solving skills**

With the talent pool growing larger each year, big tech companies are having to weed out the candidates who can solve data science problems from those who can solve real-world data science problems.

The problems you encounter in university or online are fairly squeaky clean in terms of having a clear question to answer, people to help you find your way, and uncomplicated data sets that seem to analyze themselves.

Comparatively, the problem-solving you will be asked to do in a technical interview for a big tech company will involve using the algorithms, mental models, and problem-solving skills you’ve learned to tackle something without clear constraints.

Some of your competitors may have years of industry experience behind them which they have used to refine their thought processes in such a way that they can solve these real-world problems in their sleep. This means that you have to rise to their level and alter your way of thinking to support the same problem-solving abilities.

**Your competitors will probably have several years of industry experience and the educational qualifications to match**

Nowadays, it seems that everyone has a bachelor’s degree and has been coding since they were five years old.

No matter where you are in your data science journey, whether it’s your first big tech interview or your sixth, your focus should not be on overtaking your competition on pure skill (because let’s face it, everyone has talent at this stage), but should instead be on outperforming them in the areas where you know you excel.

It can be easy to get wrapped up in thinking about your competitors. However, [you can’t control their skill](https://www.freecodecamp.org/news/coding-interview-prep-for-big-tech/), performance, education, or past experience, which means that all you can do is focus on yourself.

Therefore, the focus should be on optimizing the skills you have that set you apart from the competition and on refining the technical skills that you have in common with them.

**If you’re making a career change, the hardest part of the process will be getting a foot in the door**

With recruiters not giving a resume more than [7.4 seconds](https://www.hrdive.com/news/eye-tracking-study-shows-recruiters-look-at-resumes-for-7-seconds/541582/#:~:text=In%20its%202018%20Eye%2DTracking,an%20average%20of%207.4%20seconds.) of their time, it can be tough to make it through the door when you’re trying to make a career change.

While your resume can be as geared as possible towards getting a job in data science, recruiters may not see the important underlying details that show what a great candidate you would be amongst all of the less irrelevant work experience.

A certain amount of subjectivity pervades the recruitment process which means that the same formula won’t work the same way twice. This means that you need to figure out the best way to communicate your qualifications to recruiters and show them (instead of telling them) why you should qualify for an interview.

The underlying theme here is that, to succeed in this competitive landscape, you need to do your homework and figure out what the hiring team is looking for and then turn yourself into their ideal candidate.

**Choose your learning resources**

At this point, you’ve already spent hours learning the fundamentals of data science. Unfortunately, the learning doesn’t stop at the point where you can conduct a successful data analysis.

Now, the focus is on building mental models, practicing algorithms, getting used to real-world problem-solving, and learning how to communicate what you’re doing while you’re doing it.

The main focus should be on refining your communication skills. Hundreds of resources are available on the internet that can help you practice building mental models, using algorithms, and solving real-world problems. However, few resources out there guide you through how to communicate during a technical interview.

What recruiters are looking for is an individual who can talk them through the thought process being used to solve the interview questions. While many data scientists can sit with their heads down at a computer and come up with a somewhat decent solution to a problem, few can talk someone else through their thought process while doing the problem.

What tends to set candidates apart is their ability to communicate properly with the recruiters who are evaluating them.

Once you’ve decided which resources you will be using to refine your skills, be they Leetcode, Algoexpert, or Kaggle, record yourself talking your way through each problem as you solve it. Not only does this give you experience in refining your mental models, algorithm usage, and real-world problem-solving, but it also prepares you to communicate efficiently with your interviewer.

[Recruiters](https://www.freecodecamp.org/news/coding-interview-prep-for-big-tech/) are wanting to know how candidates think, reason, analyze, interpret information, and collaborate with others. By practicing these skills out loud, you will give your interviewer a great glimpse into the kind of person you would be working with the team.

**Determine how you will stand out during the interview process**

Recruiters are highly trained in being able to smell falsehoods from a mile away.

This means that anyone who enters a big tech interview that is only there to get a job and is not genuinely interested in the role will likely be disregarded in favor of someone who’s excited about the prospect.

Candidates who stand out in big tech interviews tend to ask the most [interesting questions about the company](https://www.freecodecamp.org/news/coding-interview-prep-for-big-tech/). It’s easy to forget that interviews are two-way processes: as much as you’re being interviewed as a potential member of a new company, you should also be interviewing them to see what it would be like to work for them. By focusing your questions on the team and the office culture, you will impart your interest and genuine desire to work for the company — not to mention you may avoid a bad situation if a company seems like a bad fit after your questioning.

Outside of setting yourself apart by asking excellent questions, now is the time to ensure that you can carry out every skill listed on your resume — particularly the skills that you believe will set you apart. With [78% of job seekers lying during the hiring process](https://www.cnbc.com/2020/02/19/how-many-job-seekers-lie-on-their-job-application.html), it’s important to brush up on all the skills you list on your resume.

For data scientists, skills or assets that may set you apart during the interview process include business intelligence, speaking more than one language, advanced machine learning or artificial intelligence abilities, project management skills, and creativity.

You may notice that many of the skills listed above are considered “soft” skills. As mentioned above, everyone at this stage knows how to code and conduct data analyses. However, you would be surprised to find that many data scientists don't have many of the soft skills listed above. For big tech companies, candidates who have advancement potential are much more valuable than those who will eventually stagnate.

**Interview planning and strategy**

Now comes the culmination of all your previous efforts — planning your interview strategy.

This involves having a deep understanding of the different types of coding interviews you may encounter at each big tech company. While some companies are similar, others have their own unique process that they use to weed out their ideal candidates.

This stage [involves](https://www.freecodecamp.org/news/coding-interview-prep-for-big-tech/) preparing for all formats of technical and non-technical interviews, as well as understanding the finite details of how a company organizes, runs, plans, staffs, evaluates, and weighs the interviews.

By having this [information](https://www.freecodecamp.org/news/coding-interview-prep-for-big-tech/) under your belt, you can begin planning your interview strategy. This involves playing to your strengths and weaknesses so that you enter an interview at your peak level. For example, you don’t want to [schedule interviews when you’re least alert](https://www.freecodecamp.org/news/coding-interview-prep-for-big-tech/) or schedule laborious interviews back to back without having a break.

[Successful big tech interviewees](https://www.freecodecamp.org/news/coding-interview-prep-for-big-tech/) have found that transparent communication when it comes to planning interviews provides them with the opportunity to demonstrate their collaboration and communication skills with the recruiter, and also lets the recruiter know that other opportunities may be on the table which increased their value as a candidate.

**Key takeaways**

* Begin the process by understanding the realities of the competitive landscape — this helps give you a clear picture of what you’re up against and what to prepare for.
* Choose learning resources that refine your usage of mental models, algorithms, business intelligence, and coding, that also allow you to practice communicating your thought process to simulate the interview process.
* Focus on a few key areas that will help you stand out against your competitors — remember, everyone knows how to conduct data analyses at this point, so you will want to focus on soft skills or alternative assets that make you unique.
* Plan your interviews using a personal strategy that helps you play to your strengths and avoid your weaknesses by having a thorough understanding of how a company organizes, plans, staffs, evaluates, and weighs interviews.

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