

How does one prepare for a data scientist interview topic-wise?

This question previously had details. They are now in a comment.

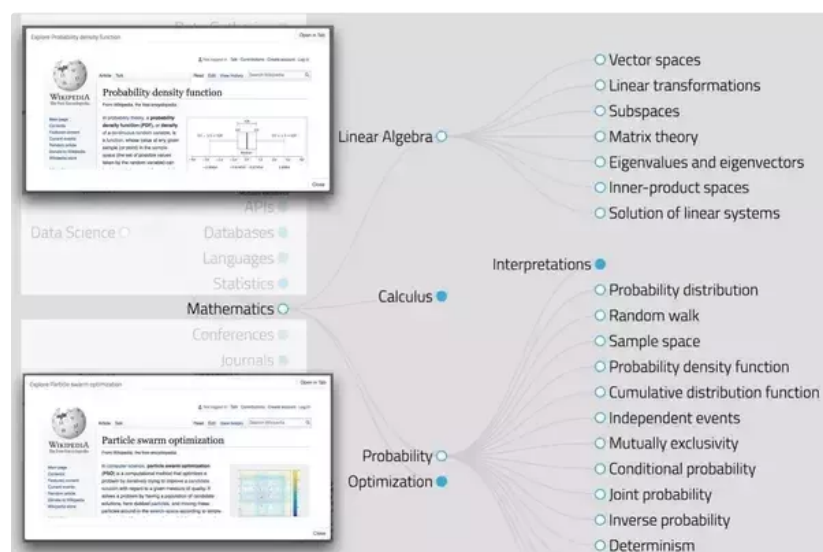


Sean McClure · February 16

Founder Kedion, PhD, Builder of AI applications.

You should be able to showcase knowledge in both *technical* and *nontechnical* aspects of the position. In both cases you should learn to think in terms of high-level concepts, and be able to provide details on a few examples of each. This will add structure to how you approach preparing for an interview and save you a lot of time.

For a comprehensive breakdown of the *technical* topics in data science you can see [here](#). It provides an interactive overview of the current trends and topics in Data Science. Practice being able to give high-level answers to the different parts of the tree; *what is it and why would you use it?* With time you can revisit the articles on any topic and get to know more details.



It is important to realize that in interviews, while **the employer is in control of the high-level topics, you are in control of the examples**. For instance, the interviewer might ask how you would validate a classification model, or to describe the architecture of a deep learning network. These are high-level topics, but *you* get to choose the specific example you want to talk about. This is why the tree can help you prepare since it is a hierarchical view, where each topic extends from its parent category. Practice being asked about a higher-level topic towards the left of the tree, and be able explain one of the specific examples on the right where the wiki is presented. This way you are not spending a lot of time trying to understand every aspect of data science deeply; you are taking a *structured approach* to being able to give examples over a range of high-level topics.

For *nontechnical* topics you should be thinking in terms of how you would work with traditional software developers, and other members of the product team. How would you align the steps of the machine learning workflow to the overall product strategy? What data would you **gather**, how would you **prepare** those data, which models would you **build** early, how would you **validate** them, and how might they be **deployed**. The important part here is these questions are not looking for technical answers, but rather how you would make decisions in a way that benefits the whole product being built. Each of the above steps needs to be done in concert with a team building a real-world piece of software expected to go to production. Things move quickly, and need to be presented to internal and external stakeholders with little understanding of how data science works. You need to practice how you would decompose your machine learning efforts into understandable units of work that can be merged into the product lifecycle of software development.

Think of preparing for interviews as a way to put in place your version of a knowledge tree. This is something that gets better and better with time, as you learn about more topics and are able to explain them more effectively. While this *concept-to-detail* approach is a great way to prepare for interviews, its benefits extend well into your career. This becomes the high-level understanding you bring to every challenge in data science, with your real-world experience allowing you to enrich and grow each branch of your knowledge tree.

Above all, have fun and bring your passion. When I see someone's drive for wanting to solve



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**Schmichael Chen**

February 27, 2018 · 1 upvote from Sean McClure

Thank you very much for taking the time to write an insightful answer, Sean.



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