Why do you think companies are spending so much time focusing on technical/programming types of questions in data science interviews? In your own opinion why do you think there is a focus at many of these companies on data structures and algorithms/efficient programming and less of an emphasis on the modeling aspect of the interview? Do some research on the data science coding interview process and provide an argument as to why companies put so much emphasis on this nowadays.

I think the coding interview questions are used to test candidates' problem-solving skills and to demonstrate technical knowledge of programming languages in a real-time. These skills are used daily and being familiar is essential for a daily job and a company will need to screen out candidates who have minimal technical skills [1]. The runtime and space usage of an algorithm are also important and will rely on how the code is written [2]. To be able to code efficiently, a candidate would need to know different types of data structures well and how to use them, and using it will demonstrate his/her technical competence and problem-solving skills [3, 4]. Interestingly, there are some people that the coding interview is “overused or misused”, giving the reasons including disadvantages of some candidates solving problems under high pressure, problems that are not relevant to the job, etc [5]. I would agree that the coding interview should not be just a gatekeeper to filter candidates, or the only way to reflect if a candidate is a good fit. Other interview processes including cross-functional collaboration, communications, and business acumen are also important.

[1] <https://www.stratascratch.com/blog/data-science-coding-interview-questions-with-5-technical-concepts/#:~:text=A%20data%20science%20interview%20involves,such%20as%20SQL%20and%20Python>.

[2] <https://datascienceprep.com/blog/coding-guide-for-data-science-interviews>

[3] <https://www.airswift.com/glossary/coding-interview#:~:text=It's%20designed%20to%20assess%20a,a%20collaborative%20editor%20or%20whiteboard>.

[4] <https://medium.com/@shafiqa_iqbal/everything-you-need-to-know-about-coding-interviews-in-big-tech-companies-bdd58720b0b5#:~:text=Coding%20interviews%20are%20designed%20to,most%20capable%20candidates%20are%20selected>.

[5] <https://dev.to/bradstondev/why-i-stopped-interviewing-with-companies-that-require-a-coding-test-2j6n>