The Whiteboarding Technical Interview Experience from the Interviewee Perspective

Teresa Thomas
teresa2020@vt.edu
Virginia Polytechnic Institute and State University
Blacksburg, Virginia, USA

ABSTRACT

Technical interviews often involve writing code on a whiteboard or remote editor and thinking aloud in response to an interviewer's programming problem. Our study is a qualitative interview study, currently conducted with students close to graduation or for those who are recently employed out of school. The technical interview process is an often stressful one for many interviewees. We seek to understand the concerns and thoughts behind the technical interview from the interviewee perspective to see the potential in how to improve the technical interview process.

CCS CONCEPTS

• **Technical Interview**; • **Whiteboard interview**; • **Leetcode**;

1 INTRODUCTION

Technical interviews often include some form of writing code on a whiteboard or remote editor, in front of an interviewer. Either way, technical interviews where the interviewer is watching the interviewee live have been known to be a stress-inducing experience [1] [4]. This can be problematic by resulting in poor interview performance due to stress despite competency. In order to do well in the technical interview, one must practice outside of the typical computer science curriculum. This requires extra time on top of academics and general activities which can make it difficult for interviewees. Studies have been conducted to understand developer viewpoints towards technical interviews[2], the technical interview from the interviewer perspective [6], and the interviewee perspectives on the software engineering hiring process through Glassdoor reviews[3].

We seek to understand the experience of the technical interview from the interviewees' perspective to understand the preparation phase for interviewees and common concerns. To that end, we are currently running a semi-structured interview study. We anticipate

the findings of this study can be used to better the technical interview process and help interviewees effectively prepare for the technical interview process.

2 METHOD

We are interviewing college students that are currently looking for employment or recent college graduates who are employed and have done whiteboarding interviews. The interviews are 45 minutes to an hour long. After interviews are done, coding is done in batches through grounded theory [5]. This code is then synthesized into common themes. So far, we have conducted 10 interviews and finished coding 5 interviews.

3 RESULTS

Thus far, we have identified 234 codes and 7 common themes. The themes are listed above. Due to limited space, we will only explain three of the themes along with an example excerpt from an interview.

3.1 Anxiety

"Personally, I think it's really just on the spot because nervousness and anxiety, that sort of thing. And sometimes my mind just goes blank. I have I'll have like a train of thought and then some random noise will stop me entirely."

Many interviewees get anxious due to the on-the-spot thinking in a short time frame required during the technical interview. This makes it difficult for interviewees to perform well under pressure.

3.2 Asking Questions

"I try to repeat the question to myself, and I definitely see if there's any cases or things I need to take note of and ask the interviewer and I'll try to speak my train of thought and hopefully if the interviewer is a good interviewer, they would sort of take what I'm saying and focus my mind into somewhere."

When stuck, interviewees sometimes looked to the interviewer for thoughtful guidance on how to continue with the problem. To a degree, an expectation of collaboration was expected from the interviewer to progress in a thoughtful manner.

3.3 Mock Interviews

. . . "as I'm writing the code, like really explaining through what I'm doing and like asking them[mock interviewer] if there was anything that I didn't explain well or if they were confused by anything I was doing. Like, that really helped me learn like what I needed to talk about during the interview"

Table 1: Themes Found in Interviews Thus Far

Theme	Brief Explanation
Anxiety	It was common to get anxious due to on-the-spot thinking required and pressure of the interview.
Thinking Aloud	Thinking aloud was seen as an important part of the technical interview process that some struggled with and could be improved with practice.
Asking Questions	When stuck, many interviewees looked to the interviewer for guidance.
Feedback	Hearing thoughtful feedback from peers and interviewers were helpful for the interviewee.
Mock Interview	Those who practiced mock interviewees often found them helpful for interview preparation.
Prep-Life Balance	Some struggled to find sufficient time for Leetcode amongst academics and general activities.
Academic/Job Relevance	It was generally agreed that academics alone were not sufficient to prepare for the technical interview and that the technical interview had little relevance to the actual job.

Those who practiced mock interviews with peers felt more confident going into the technical interview. Mock interviews are a form of practice that allows the interviewee to simulate the two-way communication with live problem solving that cannot be solved alone. It was also found in a study that mock interviews were helpful for many students in a Data Structures and Algorithms course [7].

4 CONSIDERATIONS & CONTINUATION OF RESEARCH

The study is still ongoing so the common themes found and results considered may change with the addition of more coding of more interviews. We also consider that all of the students interviewed thus far are current students or alumni of Virginia Tech Polytechnic Institute and State University. Ideally, we are able to broaden the range of interviewees outside of this university. We hope the results of this research can be helpful in understanding the technical interview process from the interviewee perspective.

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