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Subject: Proposal for Improving the Interview Process for Software Engineering Roles

Introduction

With the rise of the tech industry in the last two decades, especially as computers have become more and more ubiquitous, the demand for skilled workers in the field has increased year over year. Despite the rising enrollment in Computer Science and Information Technology education programs employers are still having difficulties filling seats and finding employees that make it through the interview process to meet the demands of the fast-moving field. On the opposite side of the spectrum the game involved to pass through the process has led to freezing out people who would be equally competent at the job required, but cannot perform the arbitrary tasks involved with the interviews.

Problem

Interviews for Software Engineering roles are most often multi-part tests starting with online coding challenges and logic tests, and usually ending with whiteboard programming problems in person. The issue with this system is that in attempting to see the skills and problem-solving abilities of the candidate, they are done so with the artificial difficulty added of being timed, restricted access to resources that would be present on the job, and esoteric problems that are not representative of the work required for the position. Furthermore, because of the separation of job requirements from those in the interview system, those who get through the process may simply only have the skills and knowledge required to get through the interview but not the ones sufficient for the job. Those who have capability to perform the job may not have the ability to pass the process.

Proposed Solution

A possible improvement to the process in place can be done by choosing alternative styles of questions for the same format of multi-part test-based interviews. An example of this could asking the candidate a design question versus the common obscure ones used. Another potential improvement could be replacing the quizzical timed interview questions with a take-home project that the applicant can work on in their own time with their normal resources and a similar format to that of a real job. This would also mean the assignment is a much more practical assessment of skills as well as a good test example of what the job might entail.

Scope

General areas of inquiry for research of the problem and solution:

1. What about the current process leads to false positives hires and false negatives rejections?
2. What alternative methods help companies find suitable employees?
3. What alternative methods help applicants display their skills and knowledge to potential employers?
4. What type of questions more accurately show general knowledge in software engineering?
5. What are the financial costs of switching from the status quo for both the employers and the applicants?

Approach (to research)

I will do consultations with industry members including Chris Zhu, Software Engineer at Airbnb, Huzefa Fatakdawala, Software Engineer at The Chan-Zuckerberg Initiative, and potentially Jonathan Cohen, Software Engineer II at Microsoft. Huzefa has extensive experience on the applicant side of the hiring process having applied to and worked for several companies across the industry, while Chris and Jonathan have conducted engineering interviews at Airbnb and Microsoft, as well as given feedback on candidates to hiring managers.

Qualifications

I will receive my Bachelor of Science: Major of Computer Science in June of 2018 and have been actively apart of the issues with the hiring process for several years now as both my classmates and I have been trying to accrue experience before completing our degrees. I previously worked at Microsoft in 2016 for 8 months and have also gained first hand experience being interviewed at other tech companies like Facebook, Google, Amazon and many more.

Conclusion

At this point in time the burgeoning tech industry continues to flourish yet still encounter these hiring growing pains. Action is needed to improve the hiring processes both for companies to fill the seats required to get their products to market and to help engineers find jobs they find meaningful and progress their careers. Hopefully by pursuing the scope mentioned earlier I will be able to suggest improvements for the issues and inefficiencies and make an impact.