How to cracked the job at Microsoft

After reviewing some past Microsoft interviews experiences, I found that it asked mainly questions from the following section:

- Computer Fundamentals
- Data Structures & Algorithm
- System Design (HLD & LLD)

1. **Computer Fundamentals**:

I have gone through all the important concepts of OS, OOPS, DBMS, and Networking.

2. **Data Structures & Algorithm** (DSA):

- In Microsoft, questions are asked from all the data structures so don't SKIP any.
- I mainly prepared from LeetCode, GeeksforGeeks, and the self-prepared DSA notes that you can download from my Telegram channel https://lnkd.in/gYXf3VxK
- I tried to solve questions in order of brute force to best-optimized solutions.
- For each question, First I tried to write algo/code on paper, and after verifying it then only wrote code on the machine.
- Kept making notes of important questions.
- After each chapter, I used to give Mock Interviews (In-person & Online) to test my knowledge.
- After the mock Interviews, I felt that I am lacking in Dynamic Programming and Graphs concepts so spend extra time on these two topics to make them strong.

3. **System Design** (High-Level Design):

- First, I learned the key components of the system design (like Load balancing, Sharing, Data partitioning, Polling, etc.) then start going through some problems.
- System design questions are very open-ended; every person approaches them differently but by following the above resources you will get a good idea about what standard way to approach them.
- I used to give mock interviews and discuss system design questions with my friends which helped me to understand how to approach system design questions and also learned things in depth.
- I have gone through 20-25 real-time system design questions which helped me.

4. **System Design** (Low-Level Design):

- For low-level design, I read the "Gang of Four" Design Pattern book and solved a couple of problems that helped me.

5. **Important Tips**

- Be consistent during preparations.
- Revision of past topics is really important, I tried to spend 20% of my time revising the previous and 80% on the current topics.
- Go for quality preparation rather than quantity as there is no fixed set of questions.