



HOW TO ACE YOUR NEXT TECHNICAL INTERVIEW

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What is it like to interview at AWS [Elemental](#)?

I do not need to study ...

I should use buzzwords to appear smarter

I need to keep my thought process to myself

I am the only one being interviewed

I need to keep my thought process to myself

I have to ace each session of the loop to get a job

Behavioral Focus

Amazon Leadership Principles

<https://www.amazon.jobs/principles>

Leadership Principles

Our Leadership Principles aren't just a pretty inspirational wall hanging. These Principles work hard, just like we do. Amazonians use them, every day, whether they're discussing ideas for new projects, deciding on the best solution for a customer's problem, or interviewing candidates. It's just one of the things that makes Amazon peculiar.

I know myself *really* well

LEARNING YOURSELF

- For each of your last three jobs:
 - What were my highlights?
 - What were my lowlights?
 - What would my manager say about me?
 - How would I describe my manager there?
 - How would my peers describe me?
 - What did I learn?

LEARNING YOURSELF

- What three things am I actively doing to improve my overall effectiveness?
- What differentiates me?
- What would I like to become better at?

Software Engineers Coding Interviews

Data Structures and Algorithms
Clear and Maintainable Code
Problem Solving

General strategy:
Repeat question
Ask clarifying questions
Build test cases
Start with the simplest answer
Optimize
Verify

Practice coding the way you would actually code in the
interview

Whiteboard, paper or laptop?

Make your choice before you even set foot in the door.

Whiteboard: Library study rooms

Learn to make good use of a limited space.

Paper: Make sure your handwriting is clear. Interviewer could be reading your work upside down.

Laptop: Be comfortable typing code without the assistance of an IDE. Use Hackerrank-like services for practice.

Find an interview buddy. Time yourself.

Given an array of unsigned ints, identify if any two numbers in the array add to 10

2 for loops

{
{1}
{10, 0}
{5}
{1,4,5,3,6}
{1,4,5,3,8}

```
public boolean sumTo10(int[] a) {  
    for (int i=0; i<a.length; ++i) {  
        for (int j=0; j<a.length; ++j) {  
            if ( a[i] + a[j] == 10)  
                return true;  
        }  
    }  
    return false;  
}
```

2 for loops

```
public static boolean sumTo10(int[] a) {  
    for (int i=0; i<a.length; ++i) {  
        for (int j=i+1; j<a.length; ++j) {  
            if ( a[i] + a[j] == 10)  
                return true;  
        }  
    }  
    return false;  
}
```


use an additional data structure

{
{1}
{10, 0}
{5}
{1,4,5,3,6}
{1,4,5,3,8}

```
public boolean sumTo10(int[] a) {  
    HashSet<Integer> complemenets = new HashSet<Integer>();  
  
    for (int i=0; i<a.length; ++i) {  
        int val = a[i];  
  
        if (complemenets.contains(10 -val)) return true;  
        complemenets.add(val);  
    }  
    return false;  
}
```

Clear and Maintainable Code

```
public boolean sumToN(int[] a, int n) {  
    HashSet<Integer> complemenets = new HashSet<Integer>();  
  
    for (int i=0; i<a.length; ++i) {  
        int val = a[i];  
        if (val > n) continue;  
        if (val < 0) throw new IllegalArgumentException("Negative numbers are not supported");  
  
        if (complemenets.contains(n -val)) return true;  
        complemenets.add(val);  
    }  
    return false;  
}
```

For a **Crash** Course....

CRACKING *the* CODING INTERVIEW

189 PROGRAMMING QUESTIONS & SOLUTIONS

THE 6TH EDITION. NOW AVAILABLE ON AMAZON.



Gayle Laakmann McDowell

Gayle Laakmann McDowell has a strong background in software development with extensive experience on both sides of the hiring table.

She has worked for Microsoft, Apple, and Google as a software engineer. She spent three years at Google, where she was one of the top interviewers and served on the hiring committee. She interviewed hundreds of candidates in the U.S. and abroad, assessed thousands of candidate interview packets for the hiring committee, and reviewed many more resumes.

As a candidate, she interviewed with—and received offers from—twelve tech companies, including Microsoft, Google, Amazon, IBM, and Apple.

Gayle founded CareerCup to enable candidates to perform at their best during these challenging interviews. CareerCup.com offers a database of thousands of interview questions from major companies and a forum for interview advice.

In addition to *Cracking the Coding Interview*, Gayle has written other two books:



Tips for Design Interviews

Collect Requirements

Work from the customer backwards

Think Operational Excellence (how to monitor the system)

Be flexible in design as you learn new requirements

We opened a region on Mars with a large fleet of EC2 instances

We need to deploy a patch to each of the machines asap



Earth to Mars bandwidth is limited

Higher bandwidth available intra-Mars

We opened a region on Mars with a
large fleet of EC2 instances

Deploy a patch to each of the
machines asap



Earth to Mars bandwidth is limited

Higher bandwidth available intra-Mars

<http://bit.ly/stanfordBinaryTrees>

<http://highscalability.com/>

For more [Detailed Refreshers](#)....

<http://bit.ly/princetonAlgos>

<http://bit.ly/MITalgos>

Phone Screen



The Anatomy of an On-Site Loop

Typically, 5-6 Interviews

Software Managers

1-2 Technical Interviews
3-5 behavioral focused interviews

Software Engineers

3 coding interviews

1-2 System Design Interview

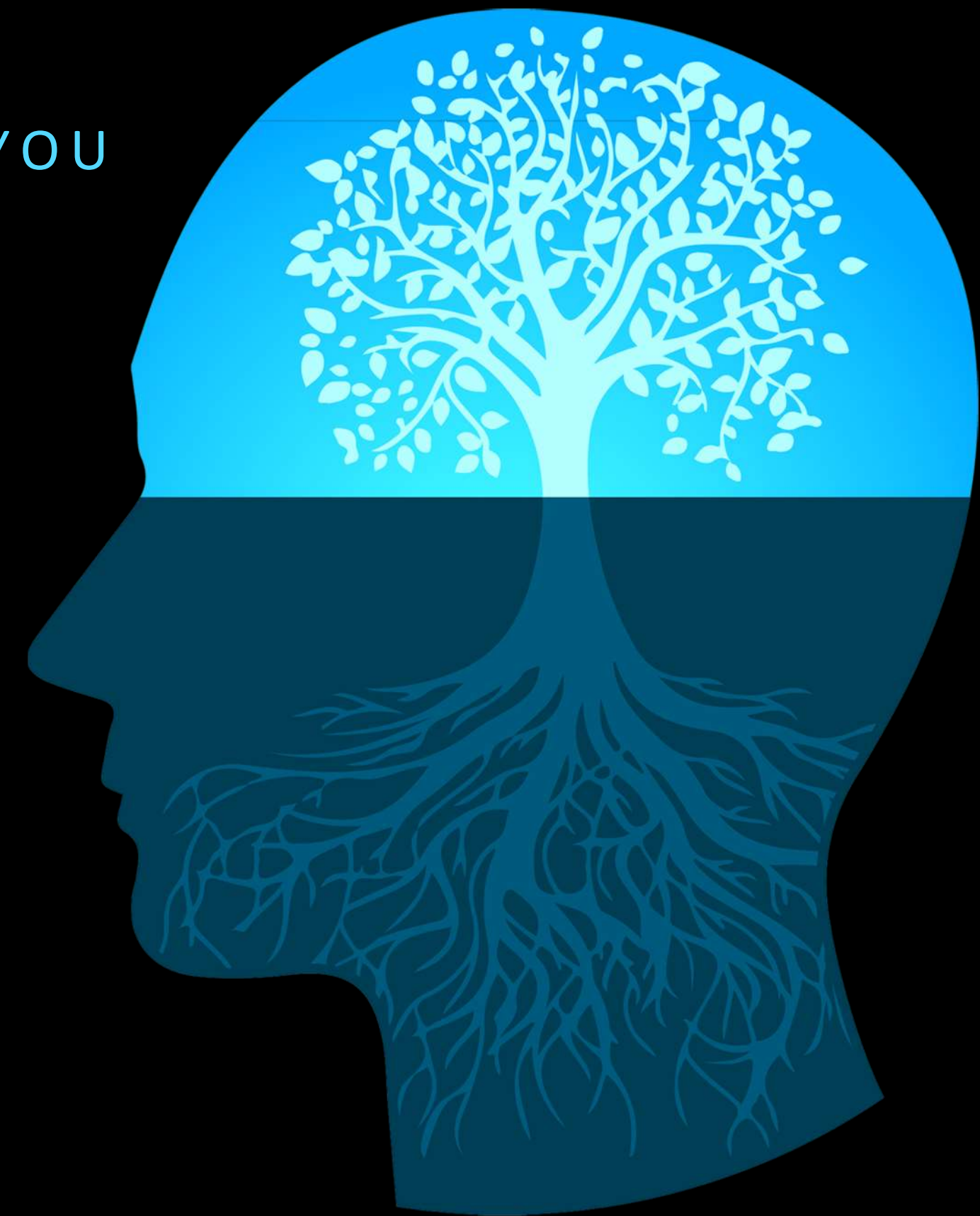
1 Behavioral Focused Interview

Behavioral assessment in each interview

Before the Interview

INTERVIEW MINDSET

YOUR PERFORMANCE DEPENDS THE MOST ON HOW YOU
THINK YOU WILL DO.



DRESSING FOR THE INTERVIEW

Ask the recruiter

Dress Comfortably

Research the Company Culture

<http://bit.ly/interviewDress>



YOU ARE INTERVIEWING THE COMPANY AS MUCH AS THEY
ARE INTERVIEWING YOU

Questions?



Thank You!