

Thank you for the time you've invested so far in the Amazon interview process. Below are some tips we hope you'll find helpful in preparing for your in-person interview.

### Video:

This is taken from our Seattle teams but has very relevant information for our Orange County Office.

- Tech Video (4:45): https://vimeo.com/43918004
- Password: amzninterviewday

### What to expect on your interview day:

You will meet with 4-7 Amazonians. However, interview schedules can change often, so we appreciate your flexibility. This mix of interviewers may include managers and peers that make up the technical team and colleagues from other technical teams.

Each interview session will last approximately 45-60 minutes. These in-depth conversations will be around technologies from your background and possibly specific to the job description. For most of your interviews, you'll be working on a whiteboard solving technical problems. You will be provided lunch if the interview is scheduled during the noon hour. Please let us know if you have any dietary restrictions.

#### **Dress Code:**

We are a casual environment. Please come in whatever you are comfortable wearing.

### **Company Background:**

Know what interests you about Amazon and the team or teams you will be interviewing with. It may also help to spend some time researching our specific products and features as well as competitors relevant to the job description. Knowing about our product groups and how they all interact with each other will give you more context around the role and will likely prompt deeper conversations and provide a richer interview experience.

#### **Recent Press Releases:**

- Game Circle
- Appstore's International Launch
- Cloud
- Kindle Fire HD Announcement

#### **Interview Style:**

Amazon does <u>behavioral</u> interviewing for the non-technical aspects of this role. We will ask questions about situations that you've been in and will be looking for specifics in your answer that demonstrate how you will perform on the job. Here's an example, "Tell me about a time a project failed.". We are looking for your role in the project, what happened, what did you do and what was the outcome. Please note that we are looking at what YOU specifically did and NOT your team.



Amazon's <u>Leadership Principles</u> play an important role in our interviews and are at the root of all of our behavioral interview questions. Knowing the leadership principles and being able to speak about your past experience as they relate will be beneficial to your interview.

### **Communication:**

Amazon has a very ambiguous environment. Therefore, some of the questions that will be asked will purposely be vague. We're looking to see if you're willing to ask those clarifying questions and push back if necessary. Speak clearly and think out loud. This will help us assess your problem solving abilities.

### **Technical Expectations:**

Please be prepared to answer high level to in-depth technical questions on concepts like data structures and algorithms, depending on the role that you're interviewing for. This most likely will include qualifying requirements, checking edge cases and white boarding your solutions with our engineers. Our in-person loops can be more in-depth than the types of questions asked during our phone interviews. Visit <a href="www.codechef.com">www.codechef.com</a>, <a href="www.topcoder.com">www.topcoder.com</a> or similar websites to brush up on problem solving and core Computer Science fundamentals.

Be prepared to discuss technologies listed on your resume for example, if you list Java or C++ you should expect technical questions about your experience with these technologies. Ask questions if you need anything clarified. Be collaborative in the interview process. We also want to learn what it would be like to work with you on a day-to-day basis in our open environment. The questions vary from high level to a deep dive, depending on the role that you're interviewing for.

### **Sample Interview Topics:**

Below is a list of broad areas that we expect people to be familiar with. It's certainly not required that you memorize all of the information outlined below, but this should serve as a helpful reference guide for the types of things you might want to brush up on before interviewing with Amazon.

### **Programming Languages**

We do not require that you know any specific language before interviewing for a technical position at Amazon.com, but familiarity with a prominent object oriented language is generally a prerequisite for success. Not only should you be familiar with the syntax of a language like C++, Java, or C#, you should also know some of the language nuances such as how memory management works, what some of the most commonly used collections or libraries are, etc. You should be able to compare languages and talk about the tradeoffs between using language X vs. language Y.

Additionally, it's considered a plus to be familiar with some scripting language such as perl, ruby, awk, etc. It's also nice to know the basics of regular expression as they are now a mainstay in both the object oriented and scripting worlds.

#### **Data Structures**

Most of the work we do involves storing and providing access to data in efficient ways. This necessitates a very strong background in standard data structures. You should know what each of these data structures is and how they're implemented; what their runtimes are for common operations; and under what circumstances it would be beneficial to use one. The below are in no particular order.



- Array
- Linked List
- Tree (Tree, Binary Tree, Binary Search Tree, Red-Black Tree, etc.)
- Heap
- Hash Table
- Stack
- Queue
- Trie
- Graph (both directed and undirected)
- Algorithms

It's also important to know efficient ways manipulate data. One great way of doing this is brushing up on some common algorithms. We'll expect that you can apply and discuss the tradeoffs between some commonly used algorithms.

### Sorting

- Bubble Sort
- Merge Sort
- Quick Sort
- Radix/Bucket Sort

# Traversals (On multiple data structures)

- Depth First Search
- Breadth First Search

### Coding

Expect to be asked to code syntactically correct code – no pseudo code. If you're a bit rusty coding without an IDE or coding in a specific language, it's probably a good idea to dust off the cobwebs and get comfortable coding with pen and paper. The most important thing a software engineer does at Amazon.com is write scalable, stable, robust, and well tested code. These are going to be the main criteria by which your code will be evaluated, so make sure that you check for edge cases and common error inputs as well as the "happy paths" through the code.

## **Object Oriented Design**

Good design is paramount to extensible, bug free, and long living code. It's possible to solve a software problem in an almost limitless number of ways, but when software needs to be robust and extensible, it's important to know some common techniques that help with this. Using object oriented design best practices is one way to build lasting software. You should have a working knowledge of a few common and useful design patterns (singleton, factory, adapter, bridge, visitor, command, proxy, observer, etc.)



as well as know how to write software in an object oriented way with appropriate use of inheritance and aggregation.

#### **Databases**

Most of the software that we write is backed by a database somewhere. A lot of the challenges we face come in to play when interfacing with existing data models and when designing new data models. You should know the basics of how relational databases work, how to design relational database schemas, as well as how to write basic SQL queries against a database.

### **Distributed Computing**

Our systems at Amazon.com usually have to work under very strict tolerances at high load. While we have some internal tools that help us with scaling it's important to have an understanding of a few basic distributed computing concepts. Having an understanding of topics such as map-reduce, service oriented architectures, distributed caching, load balancing, etc. will help you in formulating answers to some of the more complicated distributed architecture questions you might encounter.

## **Internet Topics**

This is Amazon.com, we're an online company and we expect our engineers to be familiar with, at least, the basics of how the internet works. You might want to brush up on how internet browsers do what they do, DNS lookups, what TCP/IP and HTTP are, sockets, etc. We're not looking for network engineering types of qualifications, but a solid understanding of the fundamentals of how the web works is a requirement.

### **Operating Systems**

You won't need to know how to build your own operating system, but you should be familiar with some OS topics that can affect code performance, such as memory management, processes, threads, synchronization, paging, multithreading, deadlocks (causes, detection, avoidance).

Please let me know if you have any questions before you interview. Again thank you for all your time and GOOD LUCK!