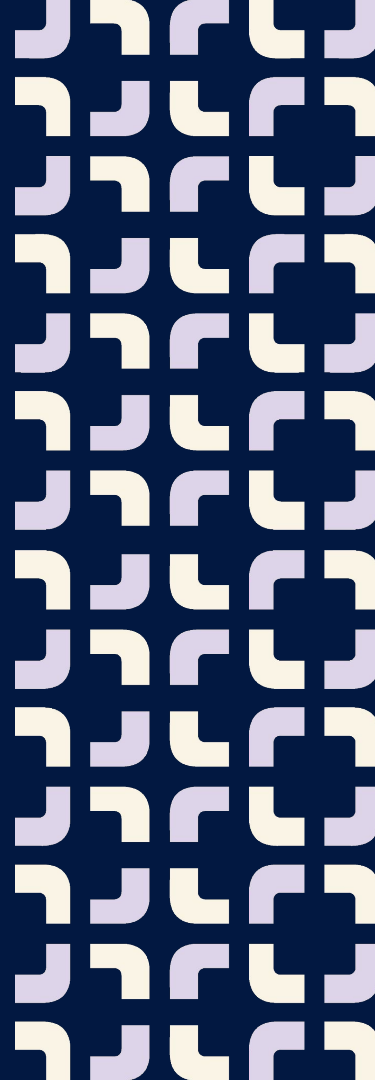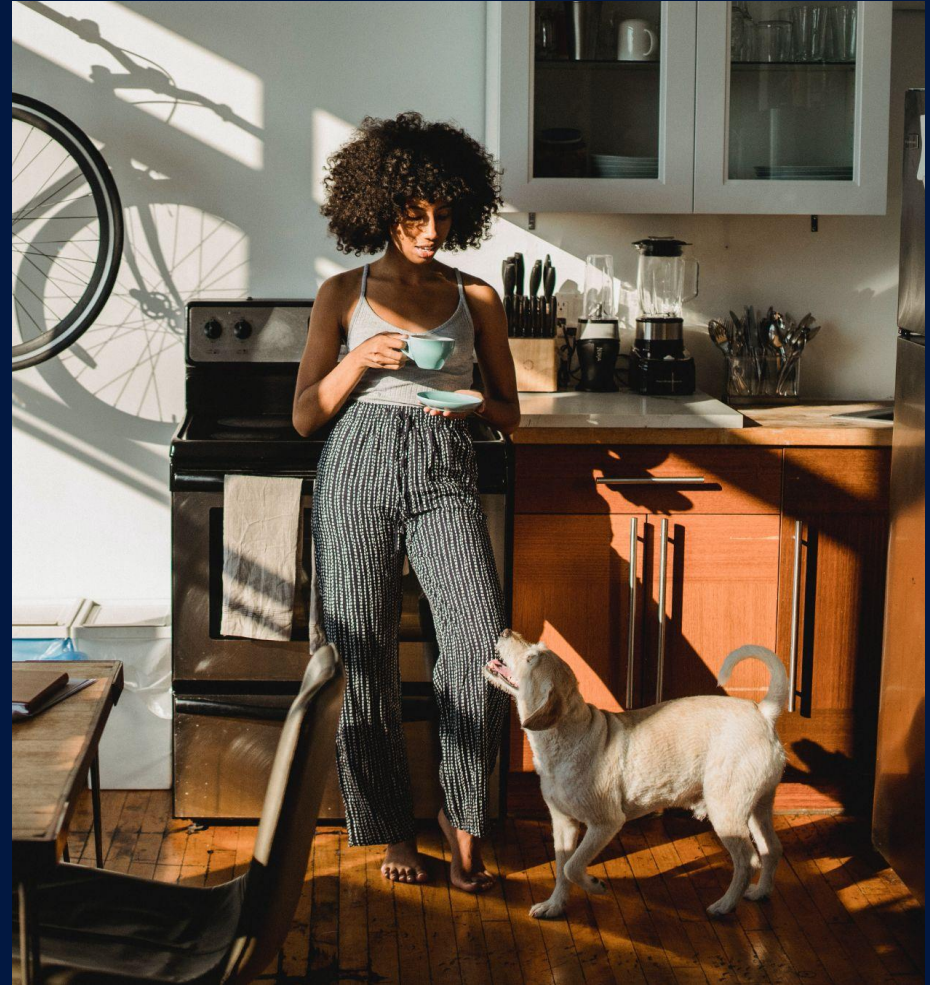# Preparing for your
Machine Learning Engineer
Interview

Grupo QuintoAndar

Thank you for your interest in joining Grupo QuintoAndar!

In this document, you will find which topics will be covered on your interviews and some other helpful tips.

Our Engineering Hiring Process

01   **Application & Screening**

At this step the candidates apply for a position and have their applications triaged by the People and Engineering teams.

02   **People Interview**

An interview with the People team, so be ready to talk about your career. This is also a great opportunity to learn more about QuintoAndar!

03   **Tech Screening · 1h**

first technical interview. We'll discuss your experience and some data science concepts, possibly using a simplified case. If successful, you'll move on to the Coding and ML interviews.

04   **Coding Interview · 1h**

In this interview where you will be expected to use algorithms and data structures to solve one or several coding problems.

05   **Machine Learning Interview · 1h**

A technical interview specific related to Data Science topics, such as Machine Learning, Deep Learning and GenAI. At this step, be ready to answer direct technical questions, as well as to solve a business case (no coding involved at this step)

06   **Offer**

If you have succeeded every step so far, then congratulations! You should receive an offer 🚀

General Interviewing Tips

✓ **Check your equipment**

Please join the Google Meet a few minutes early to check your audio and video. Also, make sure to disable any AI annotation tools before the call.

✓ **Read a little bit about us**

We'd love to see that you can talk about our business and ask meaningful questions! Show us that you care about our product and the problem we are solving.

✓ **Be clear and transparent**

Throughout the different interviews you will write diagrams and code snippets. Be prepared to explain to us your train of thought – we're interested in your process even more so than the end result!

✓ **Feel free to ask for help**

During the technical interviews do not hesitate to ask for help! We expect you to work closely with your interviewers and tackle the problem together.

Grupo QuintoAndar

System Design Interview Tips

01 **Break down the problem**

These interviews can look daunting at first. A good strategy is to break the problem down in smaller problems. Then, solve each smaller problem individually, moving towards a complete solution.

02 **Trade-Offs**

System design and architecture questions are naturally open-ended. Be ready to discuss multiple possible approaches and their trade-offs with your interviewer.

03 **Napkin Math**

You may be asked to design some large systems on the fly. Be ready to perform some quick and simple calculations to dimension components properly.

04 **Avoid Over-Engineering**

Attempting to cover every corner case from the beginning can lead to very complex systems. Focus on providing simple solutions, discuss their limitations with the interviewer, and then improve them as needed.

Coding Interview Tips

01
Programming Languages

We expect you to be comfortable with at least one programming language of your choice[1]. You should know Objected Oriented Design as well as how to test your code.

02
Data Structures

Try to familiarize yourself with arrays, linked lists, stacks, queues, sets, maps, trees and graphs. Know how to use them in your language of choice as well as algorithms that pair well with these structures.

03
Complexity

We expect you to be able to reason about both the time and space complexity of an algorithm and how you can improve it. You should also be familiar with Big-O notation.

04
Sorting

Have a basic idea of common sorting algorithms such as insertion sort, quicksort and mergesort.

05
Recursion

Many problems require recursion or can be solved more easily through the use of recursion. Be prepared to use it if the need arises.

06
Correctness

You will use an online IDE with basic features such as code completion and syntax highlight as well as the ability to run and test your code. Make use of those features!

1. Codility only supports the languages under *Interview* in this article. Understand that picking another language will remove access to certain features such as syntax highlight, code completion and access to an execution environment which can affect your performance.

Codility

Your coding interviews will take place in the online platform Codility.

A QuintoAndar Engineer will provide you with one or more challenging algorithm problems. You will have 40 minutes to implement a correct solution while observing good coding practices.

We strongly suggest that you take this demo test before your interviews. Thus demo test is easier than the interview but it will help you familiarize yourself with the platform.

Take demo test

Files

task1
  solution.java
  test-input.txt

solution.java ✕

```java
1   // you can also use imports, for example:
2   // import java.util.*;
3
4   // you can write to stdout for debugging purpo
5   // System.out.println("this is a debug message
6
7   class Solution {
8       public int solution(int[] A) {
9           // Implement your solution here
10      }
11  }
12
```

To leave editor use Ctrl + Shift + M

Test Output