Goldman Sachs Interview Preparation.

WE'RE LOOKING FORWARD TO MEETING YOU

We want you to enter this process in the best possible position to showcase your unique qualities and ultimately to explore and fulfill your potential here. To help you navigate your upcoming interview, we've compiled some information about us and our interview process.



YOUR GROWTH

Learning never stops at Goldman Sachs. From a wide range of orientation, skill-development and promote programs to online learning, and <u>Talks at GS</u>, which provides access to some of the world's foremost thinkers and innovators, we're committed to helping you advance and grow. Here's some of what you can look forward to:

LEARNING AND ENGAGEMENT

INCLUSION NETWORKS

YOUR WELLBEING

We support our people professionally and personally. Our wellness offerings range from in-house mindfulness workshops to resilience coaches, on-site health centers and medical advocacy services. We also provide on-site full-time and back-up childcare centers, paid family leaves, reimbursement for breast milk shipping and an "Expectant Parent Program". Please note, offerings vary by location.

MORE ABOUT OUR BENEFITS, WELLNESS AND COMPENSATION OFFERINGS

OUR COMMUNITIES

Our people's desire to make things possible extends far beyond the office. Our firm is deeply committed to serving the communities where we work and live. For more than two decades <u>Community TeamWorks (CTW)</u> has been an integral part of our firm's culture of service – with our people taking a day off from work to volunteer with a non-profit. Learn more about our commitment to <u>corporate citizenship</u>.

10,000 SMALL BUSINESSES 10,000 WOMEN SUSTAINABILITY REPORT

GOLDMAN SACHS GIVES





AHEAD OF YOUR INTERVIEW

Your interview should be a two-way conversation: we want to get to know you and we want you to leave with a better idea of what it's like to work here. To make the most of the interview, we encourage you to spend time learning more about us:



EXPLORE THE FIRM

by visiting the $\underline{\text{GS website}}$ and $\underline{\text{Careers Blog}}$

LEARN

about how we make things possible through our <u>Possibilities Stories</u> and <u>People Profiles</u>. Sign up for <u>GS BRIEFINGS</u> to read about the latest in the markets and beyond



TAKE A LOOK

at our public announcements including our financial results



FAMILIARIZE YOURSELF

with our Business Principles and the core values that define our culture



FOLLOW US on LinkedIn

FREQUENTLY ASKED QUESTIONS

Q: WHAT KINDS OF QUESTIONS WILL I BE ASKED?

A: Our goal is to learn about you. Our interviews tend to focus on real-world problems – we want to hear how you have and/or would navigate different work situations. Specific questions will be informed by the role and, of course, you should be prepared to speak about your own experiences.

Q: DO I NEED TO HAVE FINANCE EXPERIENCE?

A: No. Our people come from all types of backgrounds, experiences and industries. Our goal is to build the best, most diverse teams - it's as simple as that.

Q: WILL I KNOW WHO I'M MEETING WITH?

A: To prevent any confusion due to last-minute changes, we typically do not provide your interviewer slate in advance, but we encourage you to speak to your recruiter to ensure you're adequately prepped.

Q: WHEN WILL I HEAR BACK?

A: Our goal is to be in touch within two weeks after your interview – if you don't hear back, please check in with your recruiter.

Q: HOW DO I PREPARE FOR A HACKERRANK INTERVIEW?

A: If you are coming in for a HackerRank interview we would recommend that you familiarize yourself with the Guide to HackerRank Success.

Q: WHAT WILL THE INTERVIEW DAY LOOK LIKE?

A: While the specifics may vary, you'll likely meet with several people within the group you're interviewing for – some more senior, some peers, and sometimes more junior members of the team. Interviews will either be one-on-one or in pairs. You can expect interviews to be 30 to 60 minutes. We do not provide the interview lineup in advance.

We hope this information is helpful and welcome your feedback.

If you have any questions, please reach out to your recruiter.

PREPARING FOR YOUR VIRTUAL INTERVIEW

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We know that virtual interviewing poses unique challenges, and may be completely unfamiliar to some. We have put together this guide to share remote interviewing best practices to help you get comfortable and focus on your conversations rather than technical difficulties.

PRIOR TO YOUR VIRTUAL INTERVIEW

PREPARE YOUR SETUP:

- Download the Zoom App, a video conferencing tool we use for our virtual interviews.
- Learn how to join zoom from your home using Windows or Mac.
- Learn how to join zoom from your home using your phone.
- Test your internet connection to ensure its strong and working.

BE ON TOP OF ALL THE RECRUITING EMAILS FROM GOLDMAN SACHS:

- Look out for the interview details shared by the recruiting team. On top of sending your interview schedule, the recruiting team will be sending instructions on how to sign into your virtual interview.
- Be sure to review all of the instructions prior to your interview day so you can get your questions answered and make sure you fully understand the process.

ON THE DAY OF YOUR INTERVIEW

- **POWER UP:** Make sure your computer has full power and/or is plugged in.
- DRESS LIKE YOU'RE GOING TO AN IN-PERSON INTERVIEW: Please wear an attire similar to what you would when attending an in person interview. Across Engineering within Goldman Sachs, we have a relaxed dress code. We suggest business casual for your interview.
- JOIN ON TIME: Arrive early, just as you would for an on-site interview.
- **BE VISIBLE:** Keep your camera on at all times. We suggest to keep the height of the webcam at eye level, positioned to show your head and shoulders.
- SELECT YOUR LOCATION INTENTIONALLY: Conduct your interview in a well-lit and ideally quiet environment that is free of distractions. Given the global shift to work from home and other areas of personal life being impacted, you may have unique circumstances (kids, pets, family members, etc.) in your work area. Rest assured our interview teams are understanding of these situations. We are all in this together.
- **BE PRESENT:** Give the interviewer 100% of your attention. Turn off your other tech devices to avoid multi-tasking like checking email, phone, etc.
- ASK QUESTIONS: Even if you're far along in your interview process, there are still things to be discovered! Did someone mention a topic you don't know much about? Curious to learn more? Speak up and ask! Not only will you gain more knowledge about the team you may potentially join, but you'll also show your genuine interest in the role and willingness to learn. It may also help to prepare a few questions before each stage of the process.
- HIT A TECHNICAL SNAG? DON'T PANIC! If, despite all your tests, your call drops or video is buffering, try to stay calm. As frustrating as it might be, sometimes a quick reboot can solve the problem. Try to convey the problem as best you can and what steps you're going to take to try to remedy it. Hopefully, you can get it sorted and continue with the Zoom interview. If that doesn't work, make sure to inform your recruiting point of contact so they can help you with next steps.

PREPARING FOR YOUR ENGINEERING INTERVIEW



We are hiring talented engineers who are excited by the prospect of working with other great engineers in a fast-paced, constantly evolving environment. We're looking for people who are passionate about using technology to solve business problems, and who are always innovating to find better ways of doing things.

We will explore and assess your technical ability in a number of ways, including phone interviews, onsite interviews and through live-coding platforms such as CoderPad and HackerRank.

PROGRAMMING

We are looking for in-depth conceptual understanding of at least one programming language, preferably C/C++, Java, Python or JavaScript. You may also be required to demonstrate knowledge of APIs, Object Oriented Programming, multi-threading, testing, handling edge cases, and Front End/ Back End/Full Stack development. We often use CoderPad and HackerRank to test actual coding ability and you may be asked to create some pseudo-code on one of these platforms, either over the phone or during the onsite interview.

DATA STRUCTURES

Software engineers at Goldman Sachs regularly design, implement, and manipulate complex data structures. Depending on the role you're interviewing for, you may be asked questions about time and space complexities of libraries, and underlying data structures including arrays, hash-tables, hash-maps, linked lists, stacks, binary trees, heaps, graphs, and queues.

SOFTWARE ALGORITHMS

If you are asked about data structures, you will probably also be tested on your understanding of the most appropriate algorithms to use with different data structures, such as binary search, dynamic programming, recursion and sorting. You'll need to show familiarity with the complexity of the algorithms and of ways to improve them, so try to produce an optimal example rather than one that simply works.

MATHEMATICS

In addition to core programming, some roles will require in-depth understanding of mathematics. For these roles, you should be prepared to speak to your understanding of stochastic calculus or differential equations, probabilities and statistics, and applied mathematics or physics (as applicable).

AND EVERYTHING ELSE THAT MAKES A GOLDMAN SACHS ENGINEER...

We will also ask you about your other qualities and skills, such as your creativity in problem solving, ability to think in terms of interoperability, scalability, and performance, and your ability to deal with ambiguous specifications and find efficient solutions without a brute force approach. We're interested in understanding not just what you can compute, but how you go about doing so. We encourage you to explain your thought processes and to be ready to justify your choices. Your knowledge of financial markets and instruments can be viewed as a bonus, but it is not a requirement.



WHAT IS CODERPAD, AND WHEN WILL I USE IT?

CoderPad is a tool we use to gauge an individual's skills and suitability to join Goldman Sachs' Engineering team. With CoderPad, you will remotely share your screen with one of our engineers so that you can both write and execute code while conversing via phone about your approach to a series of problems. These will be programming puzzles centering on data structures and algorithms. The problems you tackle will be in your programming languages of choice – we generally like to cover at least two in the interview.

Like challenges on CodeChef and HackerRank, these problems all have a basis in computer science and are designed to explore your conceptual thinking as well as your practical coding ability. We want you to do well in the interview, so you may find it useful to do some research or practice before you sign up for the CoderPad interview.

HOW SHOULD I PREPARE FOR CODERPAD?

Begin by checking out <u>CoderPad's Getting Started page</u> to learn a bit more about the platform. You can also try out the free <u>demo</u> to further familiarize yourself with how CoderPad works. You will only have one chance to use the demo, so be sure to take full advantage of what it has to offer. Then, check out the Goldman Sachs Engineering Interview Preparation document for general interview tips. Be sure to look into our <u>Goldman Sachs Engineering Home Page</u> for more information.

It is the expectation of Goldman Sachs that candidates are not to review CoderPad questions in advance of their interview and not to share or otherwise distribute the questions after.

WHAT PROGRAMMING LANGUAGES CAN I TAKE THE ASSESSMENT IN?

You can select from a variety of programming languages, including C++, C, Java, JavaScript, Perl, Python and Scala among others. Select the languages in which you are most comfortable and proficient, and which are most relevant to the role for which you are interviewing. Your recruiter can assist you further if you have questions.

WHAT CAN I EXPECT FROM THE INTERVIEWER?

You will be on the phone with one or more members of our engineering team who will be trying to gauge your performance in the following areas:

PROBLEM SOLVING	QUALITY OF YOUR CODE
ABILITY TO READ AND WRITE CODE	COMMUNICATION
ADILITY TO NEAD AND WHITE GODE	GOMIMONICATION

We want this session to be as interactive as possible – so as well as as responding to the questions, you should feel empowered to ask questions of your interviewer(s). Your CoderPad assessment is designed to be a collaborative effort, where you will be given guidance as well as instructions. Listen to what is suggested and see if you can implement that direction into your work and show your ability to learn fast and be part of a team.

HOW LONG DOES THE CODERPAD ASSESSMENT TAKE?

The assessment generally takes 45 - 60 minutes to complete, but you should allow for longer just in case. After your CoderPad assessment, someone from the recruiting team will be in touch to detail any potential next steps.