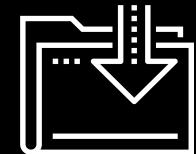




{ } Cybersecurity Interviewing

Cybersecurity
Career Week Day 3



Class Objectives

By the end of class, you will be able to:



Prepare for an initial phone interview used to screen candidates for IT and cybersecurity positions.



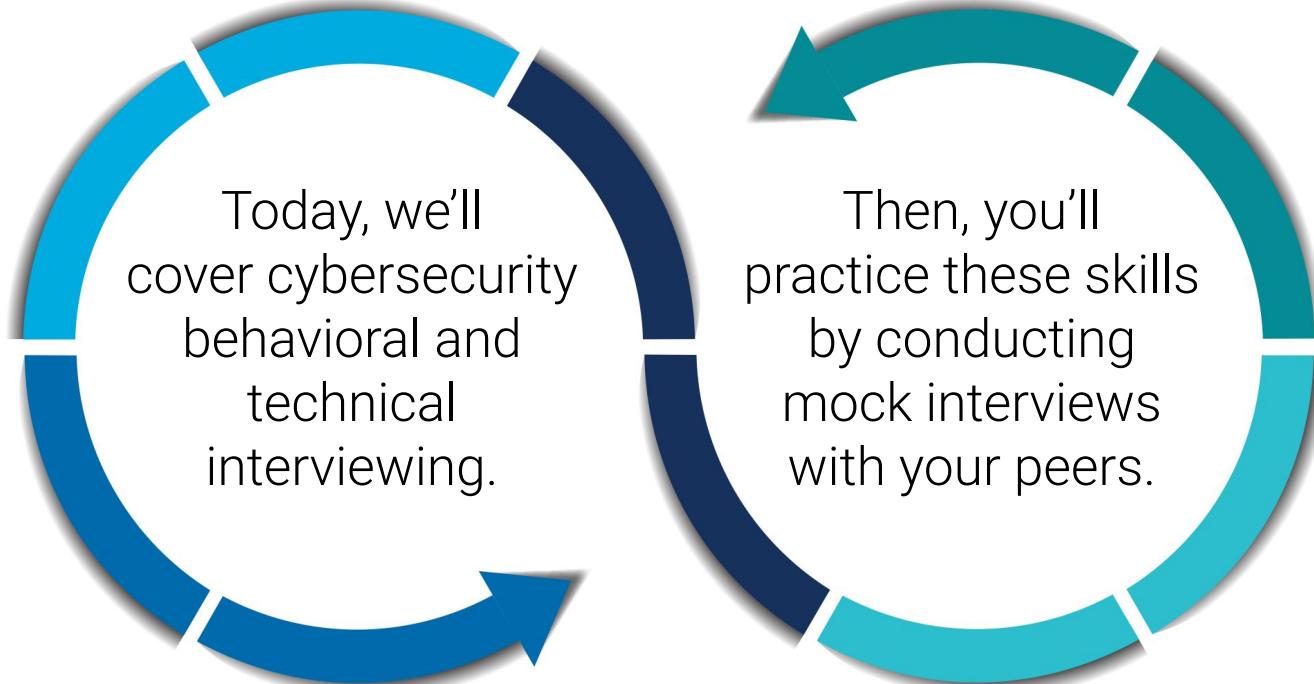
Answer technical and behavioral interview questions.



Conduct, answer, and provide constructive feedback to mock interview questions and answers.

Introduction to Cybersecurity Interviewing

Introduction to Cybersecurity Interviewing





Let's Review

Previously, we learned that:



Certification is a good way to demonstrate a specific set of skills and knowledge.



Cybersecurity professionals take a variety of paths to reach different positions.



Building a cyber network is one of the best ways to find career opportunities.



Non-traditional approaches to job seeking can lead you to less crowded career opportunities.



Building a powerful resume and LinkedIn profile can increase your odds of landing an interview and subsequently a cyber job.

Interviewing Tips

Interviewing Tips

As you prepare to interview for cyber jobs, you should consider the following questions:



What should I do to prepare for a successful interview?



What kind of questions can I expect during the behavioral interview?



What kind of questions can I expect during the technical interview?



What should I avoid during the interview?



Interview Process

Before receiving a job offer, you can expect to participate in three common interviews:

01

Initial interview
(also known as the phone screener or preliminary interview)



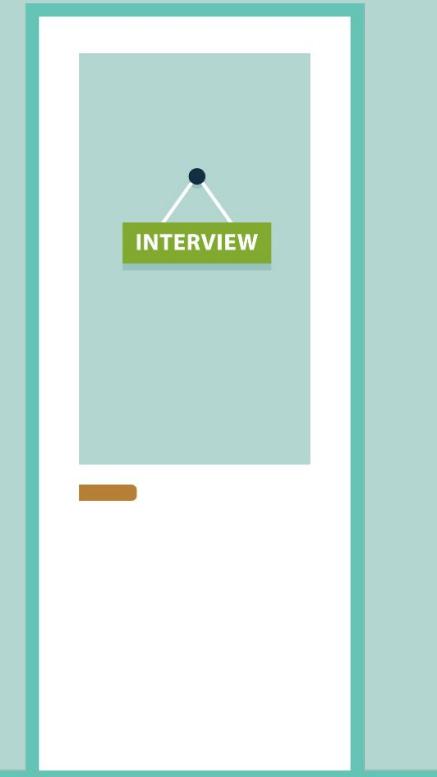
02

Behavioral Interview



03

Technical Interview



The Initial Interview

Once you've been selected as a potential candidate, an HR staffer will usually conduct an initial interview, which aims to:

-  Narrow down the list of candidates to send the final decision maker.
-  Provide basic job description, location, and hourly expectations.
-  Confirm the pay range is agreeable for both you and the employer.
-  Confirm that this is a position you are interested in.





If you move on from the screener, you will have a **behavioral interview**, which aims to evaluate your future performance based on your communication and soft skills.

Behavioral Interviews

Hiring managers use these interviews to determine how interested and qualified you are, as well as to assess your ability to communicate.



Behavioral interview questions are often similar across companies.





Behavioral Question 1

Tell me a bit about yourself.

Behavioral Question 1: Tell Me a Bit About Yourself.

This question allows you to:



Show your communication skills and accomplishments.



Highlight pieces of your personal background, interests, and work experience that show you are right for the job.



Briefly explain your work history and how you came to apply to this position.

Behavioral Question 1: Tell Me a Bit About Yourself.

This question is almost always asked, so have your answer prepared ahead of time.

- Use a past, present, future structure: your past work history, why you're currently applying for this job, and how you could contribute in this role in the future.
- Stay on point, and do not ramble. Keep your answer under five minutes.
- Illustrate your passion for cybersecurity.





Behavioral Question 2

Why are you interested in this cybersecurity position?
Why are you interested in a career in cybersecurity?

Behavioral Question 2: Why are you interested in this cybersecurity position? Why are you interested in a career in cybersecurity?

This question allows you to:



Discuss what led you to this boot camp and what parts were the most interesting or exciting.



If the question is focused on the exact position, be specific and demonstrate your knowledge of the job description.



For example: If the position uses Burp Suite, you might note how you enjoy finding web application vulnerabilities.



Behavioral Question 3

Why did you leave your last position?
Why are you looking for a new position?

Behavioral Question 3: Why did you leave your last position? Why are you looking for a new position?

Be careful answering.

Do not use this question to say negative things about your past employer.

Instead, stay focused on what you're looking for next, your passion for cybersecurity, and how this position aligns with those things.





Behavioral Question 4

Why do you want to work for this organization?

Behavioral Question 4: Why do you want to work for this organization?

This question allows you to:



Demonstrate excitement about working at this company specifically.
Make sure to prepare this answer, and do research to find something interesting about the organization.



Be specific—don't just recite the first few lines that come up in a Wikipedia search.



For example: Point out that you liked the organization's launch of a new malware identification program that was able to identify patterns in ransomware.



Behavioral Question 5

What questions do you have for us?

Behavioral Question 5: What questions do you have for us?

This question usually comes at the end of the interview.

Not asking any questions can signal to the employer that you lack interest in the job or company.
Some questions you might ask include:



What does a typical day in this position consist of?



What is your favorite part of working here?



What challenges does your company/department currently face, and how can this position help overcome those challenges?



Activity: Behavioral Interviews

In this activity, you and a partner will practice answering a behavioral interview question and providing feedback.

Suggested Time:

15 Minutes



Time's Up! Let's Review.

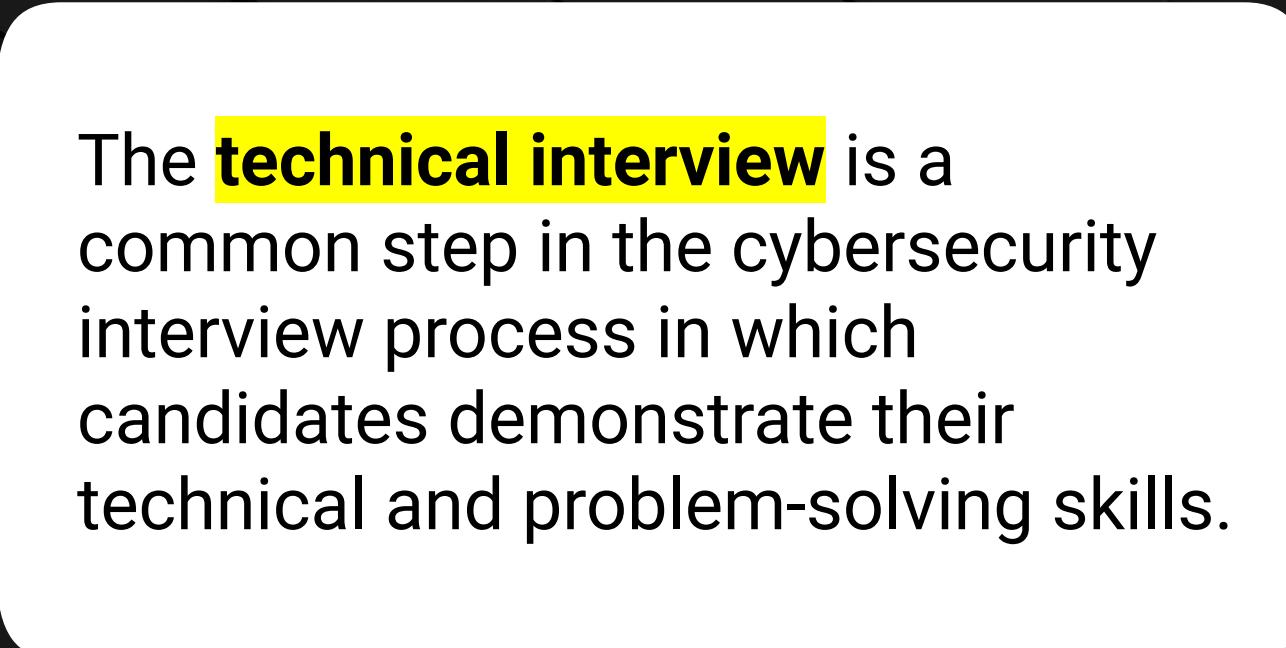
Questions?



Technical Interviews



Once a candidate has successfully moved through a screener and a behavioral interview, they will be invited to a technical interview.



The **technical interview** is a common step in the cybersecurity interview process in which candidates demonstrate their technical and problem-solving skills.

Technical Interviews

This interview typically contains three types of questions:



Basic
technical
questions

Background
technical
questions

Situational
technical
questions

Technical Interviews

Basic technical questions gauge your knowledge of specific concepts and tools. They might include:



What is the difference between TCP and UDP?



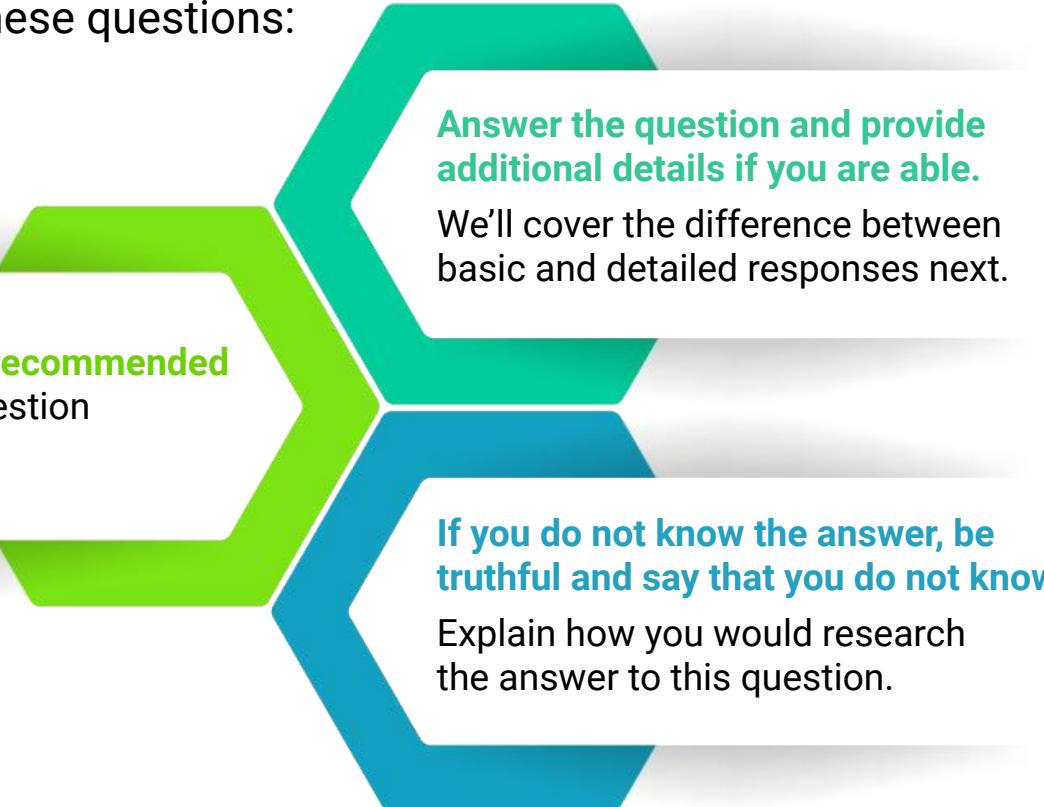
What is the difference between data in motion and data at rest in terms of security?



How many keys does asymmetric encryption use?

Basic Technical Questions

When answering these questions:



It is acceptable and recommended to recite back the question before answering.

Answer the question and provide additional details if you are able.

We'll cover the difference between basic and detailed responses next.

If you do not know the answer, be truthful and say that you do not know.

Explain how you would research the answer to this question.



BONUS

After the interview, send the interviewer the answer to the question you didn't know.

Basic Technical Sample Question

What is the difference between TCP and UDP?

Basic Answer

TCP is connection-oriented and UDP is connectionless.



Detailed Answer

TCP is connection-oriented and UDP is connectionless. TCP works well for applications that require high reliability, while UDP works well for applications that prefer higher speed over reliability, such as video games or video streaming.



Basic Technical Sample Question

What is the difference between data in motion and data at rest in terms of security?

Basic Answer

Data in motion is data that is transferred on the network between machines, or "live on the wire."

Data at rest is data that is being stored on a static file system, such as a hard drive or database.



Detailed Answer

Data in motion is data that is transferred on the network between machines, or "live on the wire." Data at rest is data that is being stored on a static file system, such as a hard drive or database.

Encrypting data in motion typically requires faster algorithms than encrypting data at rest. When data is transferred between machines, slow algorithms manifest as high latency (i.e., long transfer times).

Reducing latency requires using faster algorithms. For this reason, protocols like SSL/TLS use symmetric encryption for the main data transfer and avoid slower asymmetric methods.



Basic Technical Sample Question

How many keys does asymmetric encryption use?

Basic Answer

Two.



Detailed Answer

Two. Asymmetric encryption uses a public and private key. Each individual is required to have this two-key pair.



Background technical questions

gauge your exposure to and experience with real-world scenarios and foundational ideas.

Background Technical Sample Questions

Describe a breach or security vulnerability that you contained.



Remember, it is acceptable and recommended to recite the question back before answering.



If you have experience containing a breach of a security vulnerability, explain your specific process step-by-step.



If you do not have professional experience, pick a breach or vulnerability from the news and discuss how you would contain it.



FOR EXAMPLE:

“XYZ organization didn't patch their Apache servers, exposing an Apache Struts vulnerability. I would ensure that our organization had a detailed process to guarantee all systems were patched appropriately and in a timely manner.”

Situational technical questions

gauge your decision-making ability when presented with a problem.



Suppose you've implemented a
firewall policy on an HTTP server.
How would you test it?

Situational Technical Questions

First...

Restate the question:

"So, in this situation, I have a host running an HTTP server and I've set some firewall rules to allow access only to specific ports and block attackers from all others."

Next...

Provide elaboration and a conceptual solution:

"Since this is an HTTP server, I guess you only want to allow access to/from port 80 and 443. If the firewall is working properly, I should be able to send an HTTP or HTTPS request to the server from a foreign host, and get a response back. I should not be able to get a response from any other port."

Finally...

Explain the technical steps and tools needed to implement your solution:

"To test that I'm getting HTTP and HTTPS requests/responses, I'd use curl to hit the firewalled server from a foreign host. I'd expect to get a response. To test that all the other ports are closed, I'd use Nmap to run a port scan."

Questions?





Activity: Technical Interviews

In this activity, you will practice situational interview questions with your partner.

Suggested Time:

15 Minutes



Time's Up! Let's Review.

Questions?



Countdown timer

15:00

(with alarm)

Break



Mock Interviews

A photograph of a young woman with dark hair pulled back, wearing a light blue and white striped button-down shirt. She is smiling and looking down at a white folder or set of papers she is holding in her hands. The background shows a window with yellow horizontal blinds. An orange circle is overlaid on the left side of the image, containing the text.

The best way
to prepare for
job interviews is
to practice.

Mock Interviews



Using the provided set of behavioral and technical questions, you will work in groups of four or five to conduct, answer, and observe mock interviews.



To simulate a real job interview, you will be asked behavioral and technical questions. You will not know which will be asked.



There will likely be questions you do not know the answer to. How you respond to those questions is very important.



Everyone in the group will have an opportunity to be interviewed and to conduct the interview.

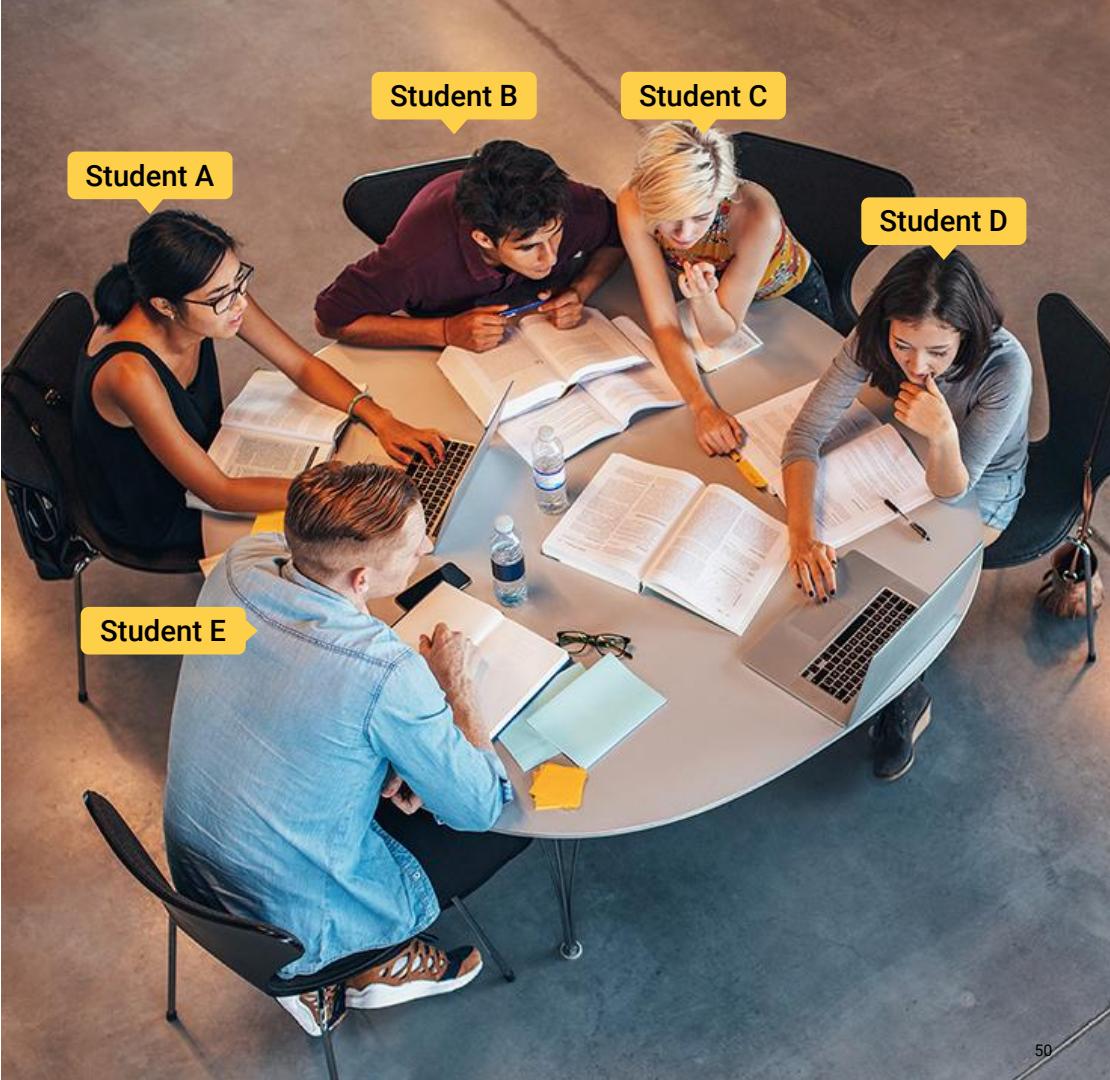


Everyone should have a copy of
their resume in front of them.
In interviews, you will likely be
asked questions about your resume.

Mock Interview Set Up

In groups of 4 or 5, each student will have an opportunity to ask and answer questions.

- Each student will be assigned a letter between A and E.
- Each student will be assigned a script with questions to ask another student.
- Three students will observe each interview and provide feedback about responses and communication skills.



Mock Interview Setup

Use the following table to coordinate interview rotation:

| Student | Interview 1 | Interview 2 | Interview 3 | Interview 4 | Interview 5 |
|---------|-------------|-------------|-------------|-------------|-------------|
| A | Conduct | Observe | Observe | Observe | Answer |
| B | Answer | Conduct | Observe | Observe | Observe |
| C | Observe | Answer | Conduct | Observe | Observe |
| D | Observe | Observe | Answer | Conduct | Observe |
| E | Observe | Observe | Observe | Answer | Conduct |



Activity: Mock Interviews

Open the interview script that corresponds to your letter.
Use these questions to conduct your interview.

Suggested Time:

1 Hour 15 Minutes



Time's Up! Let's Review.

Questions?



Cyber Interview Resources

Use the following resources to find and practice answering common cybersecurity interview questions:



Daniel Miessler: 60 Cybersecurity Interview Questions



Guru99: Top 110 Cyber Security Interview Questions and Answers



edureka!: Top 50 Cybersecurity Interview Questions and Answers



Indeed: Cybersecurity Interview Questions



Next Week

You'll complete a final research project that showcases the skills you've learned during this boot camp.

On the final day of class, you'll present your project at the bootCon conference!

Questions?



*The
End*