



Great to meet you!

This document outlines what interviewing at Alloy looks like. We hope it helps.

Engineering at Alloy

At Alloy, we help brands operate more efficiently based on actual demand. When consumers buy goods like shampoo, chocolate, or headphones, it leaves a trace - sales are tracked, and inventory levels change. Our data platform uses deterministic algorithms and AI alike to automatically connect and analyze this data, which is siloed across hundreds of channels from e-commerce to stores, suppliers, and 3PLs all the way to the brand's own warehouses. Our goal is to convert that data into actions that drive business for CPG brands.

"The challenges at Alloy range from building a robust data pipeline that's able to process terabytes of data per day, to building user interfaces that give you high-level insights but still allow the customer to drill into the details when needed. There is no platform out there that connects the supply chain end to end, and that makes our work exciting - there are no right answers, and a lot of uncharted territory."

- Lasse Holmstedt, CTO

All engineers at Alloy have the opportunity to work on any part of that stack that interests them. We organize work so that you can hit the ground running, but also support you in learning more about topics you haven't mastered yet. If you are curious and open, you'll be right at home!

Interviewing at Alloy

Engineering interviews at Alloy typically consist of the following stages:

- Intro Screen
- Coding Interview
- Final Round:
 - Coding Interview(s)
 - Design Interview
- Reference checks

Each interview consists of approximately 45 minutes of problem-solving, and about 15 minutes of conversation to get to know you as a person. You will get to meet different people, and hear their perspectives on what it's like to work at Alloy. This applies to all technical roles. Further information is given in the corresponding sections.

The interview process reflects how we do our work. While some of the questions will require you to work through a coding challenge on your own, some of them will benefit from the use of AI. We will share upfront whether AI usage is allowed for each question.

All of the interview questions we ask are directly tied to our actual work – no one will ask you questions straight out of Leetcode! We don't ask trick questions - everything we ask is a real problem we have run into at Alloy, which we hope makes for a meaningful interview experience.

The following sections provide more detail for each step of the interview process.

Technical interviews

In our technical interviews, you'll be live coding via the video conference link in your calendar invite. Because you will be working in a shared online tool (such as a shared code editor), a computer is required.

Typically, a couple of interviews focus on programming problems and in another interview you'll work through a software design problem together with one of our interviews.

Programming Problems

We'll provide some context about the problem and will share a link to a live environment that supports Java, Python, JavaScript, Ruby and several other languages. We're not particular about the language used - if you're more comfortable with a less-used language, just let us know in advance and we'll try to accommodate that.

Software Design

We'll be working together on a more abstract, high-level problem using collaborative tools like Google Docs or a virtual whiteboard.

For software design problems, we'll be working together with you to solve something more abstract, so expect to work with e.g. Google Docs.

AI-focused questions

We hope to see candidates use AI the same way we do at work - as a thought partner as well as an agent writing code based on your instructions. Above all, you should understand and be able to explain everything you submit. We'll walk through the code together, so don't ship anything you couldn't defend.

Technical interview hints

You don't need a background in supply chain to succeed in our interviews, but understanding the domain doesn't hurt! To understand the problems we're solving, our customer pain points, the type of data we process, and the work that lies ahead, you can read our case studies [here](#).

Trees and graphs are key data structures that make Alloy work at all layers of the stack. As such, our video and on-site interviews assess your skills and understanding of these concepts. But don't worry, you won't be asked to implement a red-black or AVL tree – this isn't a CS class.

You can prepare for software design questions by thinking about how you would implement a system you have not run into before.

In some interviews, we expect you to demonstrate how you use AI in engineering work. In such questions, we hope to see you use AI as a thought partner and for authoring code - with you being in the driver's seat and understanding what is being built.

For all technical interviews, we're more interested in understanding your communication style and approach to complex problems than the exact solution you arrive at. Be sure to verify your assumptions, think aloud and ask questions before writing code. When done, don't forget to test your solution and if you have time, discuss how you would get the solution up to production quality.

About Alloy Europe

Alloy Europe is fully remote, with employees working closely with our US and Canada teams.

About the Vancouver office

The Alloy Vancouver office is located downtown. We're surrounded by coffee shops, restaurants and the office is only steps away from Canada Place. It's easy to reach by a few minutes' walk from the Waterfront skytrain station.

Address

355 Burrard St, Vancouver, B.C

About the Alloy USA team

The Alloy USA team consists of two office hubs - Denver, CO and Washington, DC, as well as a team of remote employees in Sales, Marketing and Design. Our two US hubs house teams of Sales, CS and R&D staff.

Reference checks

After your final round, your hiring manager will also ask you to provide two or three references. We use this as an opportunity to discuss your past experience and learn how best to set you up for success in your new role at Alloy. To respect the time of your references, the calls last only ~20 minutes each.

A former manager or supervisor makes for a great reference as well as your former peers. If you are a recent graduate, no worries! Thesis or internship supervisors make for great references too.

Our values



Focus on what matters

Reevaluate priorities as necessary to pick the work that will have the highest impact to the customer and business. Work hard in a way that is sustainable. Choose the schedule that lets you achieve your best. Measure results, not hours. Respect your time and that of others; come prepared and leave with commitments.



Take ownership

Take initiative by proactively identifying opportunities or issues and tackling them. Strive for excellence. Hold yourself and your colleagues to a high standard. Create something that makes you proud. Follow through on our commitments to customers, users, and each other. We are all doers, regardless of role — no task is beneath you.



Iterate to excellence

Prefer action over perfection to learn quickly from early feedback. Be flexible and accept the need to make tradeoffs and change directions. Everything is a work in progress, nothing is done. Question prevailing assumptions, but understand them first. Gather evidence and champion ideas that will make our products and our company better. Verify and validate.



Communicate openly and respectfully

Offer and expect transparency to build trust. Confirm mutual understanding, especially in the face of disagreement. Treat each other with respect. Criticize constructively — the work, not the person.



Have each other's backs

When interacting with each other, always assume good intentions. Trust each other and take risks together. Give praise generously and take joy in others' accomplishments. Grow a diverse team by actively seeking different backgrounds and cultivating an inclusive culture. Focus on how others' strengths complement us, rather than how their weaknesses invalidate them.

Additional Resources

Hear what it's like to work at Alloy from some of our employees:

[Gwylim – Engineering](#)

[Amelia – Engineering](#)

[Lasse – Engineering Leadership](#)

[Michael – Engineering Leadership](#)

To find out more about Alloy, check out our [case studies](#) and [press coverage](#) as well.

Frequently Asked Questions

Alloy is distributed across different geographies. How does communication work?

We strongly prefer text-based communication, and we use a lot of tools to make this work. For example, we have Google Docs for engineering design documents, Shortcut for user stories, bugs and the like, GitHub for code reviews, Guru for a wiki, and Slack for company-wide communication. Aside from contractually sensitive information, most communication is open to all employees!

Do you have to travel?

We like to occasionally bring people together for some in-person time. As most of our engineering team members are in Vancouver, people from other geographies typically travel there. The frequency depends on where you are located and which team you are on, but at most once a quarter. That includes the company retreat that happens once a year.

What does Alloy's architecture look like?

Architecturally, Alloy is divided into three major parts: the data pipeline, the backend, and the frontend. The data pipeline is responsible for machine learning models and forecasting, as well as pulling in data from hundreds of different sources, normalizing it and processing it so that the backend can digest it.

The backend, then, does the heavy lifting: computing hundreds of derived metrics, aggregating the product-location data to any granularity, and computing actionable insights and AI-driven recommendations from the data.

The frontend combines an AI-first experience with traditional dashboarding, where an AI assistant and specialist agents guide the user to the right insights and actions based on their goal. Our proven, highly configurable dashboarding and analysis tools are leveraged by both the AI assistant and the user.

For users who want to bring their own AI tooling, an MCP server is coming soon so Alloy's data and agents can be reached from outside our interface.

We strongly believe in keeping things simple, only adding more complexity when necessary. We're constantly evaluating what the right steps are to scale the platform.

How do you use AI, in your product and at the company?

On the product side, AI is central to our product strategy. AI has completely changed how software engineering happens in a few months, which we've fully embraced. We want to be agents of that same change - pun intended - for CPG brands. Within the Alloy.ai product, we have several products that leverage AI, from our POS forecasting to assistant and agent functionality.

In our R&D department, we use AI both in our product as well as in the product development process. The field changes rapidly, and we constantly adjust our tooling based on the development tools that provide the best results.

Alloy leverages AI across the whole company, from R&D to Operations and Client Solutions. We'll be happy to share specifics when we chat!

How do you deal with technical debt?

The challenge with technical debt is knowing when to take it, and when to pay it back. We have a fairly strict code review process on GitHub to help us eliminate the unnecessary debt upfront - but sometimes, you need to take debt to first prove that there is value to the end user. Ownership is also important. Each major part of the platform has a team that's responsible for it, so it's clear who to turn to when things don't work.

What does the infrastructure look like?

We rely on Google Cloud for our infrastructure. We manage the server infrastructure with Terraform and Kubernetes, and deploy with Jenkins as our CI. We're constantly looking at scaling the infrastructure as we get more users onboard Alloy.

How does Alloy get the data?

A typical Alloy customer will want to have data in Alloy anywhere from a couple of dozen retailers on up to a few hundred. Alloy gets this data either from our customer (the manufacturer of goods) or directly from the retailers. We often have partnership agreements with retailer organizations, and pull the data directly through a service that they provide.