

Anima Health - Engineering

About Anima

At Anima, we're building the next generation care enablement platform for healthcare teams. You'll be building a product that saves lives; multiple Clinical Engineers (ex-MDs and fullstack Software Engineers) quit lucrative medicine jobs to join Anima for that very reason!

Our mission is to deliver precision medicine to everyone in the world, within 24 hours. We know *exactly* how to get there and we're moving ferociously with focus. Our ambition is to be the OS for all of healthcare and life sciences, through a proprietary active learning, crowdsourcing training architecture - we call it Anima 2.0. We already have one of the biggest, highest quality labelled datasets in the world. We're profitable, growing at 100% MoM, and went from \$0 ARR to \$1m ARR in 6 months from launch (Apr '22). We're on track to hit \$5m ARR by EOY '23. That's pretty unprecedented in SaaS, never mind healthcare!

Backed by a top 1% VC and Y Combinator (home of epic companies like Airbnb, Coinbase, Stripe) 🚀

We've raised a large Series A just 7 months after launch, in the first bear market of a decade. We were one of the hottest companies of YC's W21 batch and raised our first round in 4 days, led by Hummingbird (consistently top 1% of global returns). We have a pretty unique hacker culture at Anima with a flat hierarchy: almost everyone is technical and can code. A 'knights of the round table' structure and thinking from first principles is core to our culture, and is how we've made such rapid progress. It's reflected in how we operate:

1. There's no separate founder, product & engineering teams - instead, we have Clinical Engineers who are both their own customers (MDs) and are strong fullstack engs, collaborating with pure software engineers. Due to the quality of our team, there's a heavy focus on coaching and teaching, with minimal to no line management.
 - We've been able to make huge strides in the NHS because we all deeply understand the problem, grading tasks based on our engineering expertise, and real life clinical trade-offs. This deep domain knowledge is ultimately how we integrated with the major electronic health records (EMIS and SystmOne) in just 4 months.
2. We're relentlessly resourceful - in 14 months, we've built an extremely loved enterprise app (NPS = 87) that users have said 'seems too good to be true'. Anima can take an information complete medical history as good or better

than a typical human doctor, and automates patient comms and clinical notes.

3. Anima is a safe haven for free thinkers and we've been careful to build a culture where everyone feels comfortable being their complete unfiltered self, sharing their honest thoughts, feelings without ever needing to self-censor. Our hiring acceptance rate is around 0.5-0.8%, which is lower than YC. You're joining hyper elite special forces, and your crewmates will never let you down or waste your time.
4. We hire talented people who think from first principles and have high growth potential - great decision makers who deserve to have complete autonomy and are forces of nature when empowered with it. Decisions are never made in isolation by the founders. All information is transparently available to the whole team on our Notion - every meeting, decision, success, failure.
5. At the same time, we are deeply collaborative, and through mutual and self-challenge, we converge towards the optimum, and decisively execute. We are united by child-like intellectual curiosity and experiment and wander freely when the right path isn't clear. We believe all future managers should be formidable individual contributors & domain experts.
6. We hire candidates from all over the world. We have remote hubs in EU West, NA and India, and plans to seed some in person teams in those areas too in the next 12 months (in addition to our fully remote teams). We offer unlimited holidays and flexibility over work schedule and location.
7. We have a good time :) we've had team lunches in Duck & Waffle, Breakfast Club, dumplings in Chinatown, had private screenings in our own cinema, booked out the Sky Pool etc. We get the whole team together at least twice a year for team retreats, with the last one in Brittany, France and the upcoming one in Mexico!

Join Anima and save lives

Do you wish your work had greater tangible impact? Join Anima, and you'll solve super interesting technical problems that *will* save lives.

Hi - I'm Shun, an MD and CEO of Anima. Thanks for checking out our job ad! We're tackling a problem that has affected everyone in some way.

1. Millions die every year because their medical problems aren't treated quickly enough. Hundreds of millions suffer pain, worry and discomfort needlessly because of long waiting times. I founded Anima because I was tired of

breaking bad news to patients who later died, because they didn't get a great care plan quickly. So many of those deaths were avoidable.

2. We've built an ambitious 'Care Enablement Platform' to automate the entire healthcare workflow, starting with primary care - combining online consultation with productivity tools and a single source of patient data truth. Anima has next generation features like autogenerating coded clinical notes and patient comms, and a real time multiplayer dashboard with a Slack-like chat experience that supports 1000s of discussion channels per clinic.
3. By enabling care, we get patients optimal care within 24 hours and 10x the clinical workflow in the process.

Since our launch and first pilot in March 2022, we're now used in dozens of clinics across the country, serving 100,000s of patients. We've been growing more than 80% MoM in terms of users and revenue. We're default alive, and currently have over a decade of runway - though we expect to be strongly cashflow positive by the end of 2023.

Users love our product. The biggest testament to this is that most of our growth comes from virality and referrals with \$0 spent on marketing, despite being B2B/enterprise. We have never churned a clinic.

We are pretty unique among health techs: we have *both* medical and engineering domain expertise. I wrote the Anima 1.0 backend in Node, 80% of which is still used. I also built Annie 1.0, a tuned LLM coupled with a policy engine, that can output structured medical summaries, potential differential diagnoses and management plans. As a doctor and former HM Treasury health policy advisor managing £4bn budgets in UK health spending, I'm a technical, product-focused CEO with full stack domain knowledge and personal experience of the problem we're solving.

Anima has a unique hacker culture: everyone is technical with almost complete autonomy akin to 'Knights of the Round Table'.

In 14 months, we built the most advanced Care Enablement platform that exists.

Over 80% of the product team are ex-technical founders, former CTOs. We also have many technical domain experts ('fullstack Clinical Engineers', ex-MDs) who are their own users.

Everyone in product is technical at Anima and can write production code. This makes for a truly flat hierarchy. There's no separate founder, product or customer team - there is very little communication loss because we all deeply understand the problem, engineering, grading for potential features, and trade-offs. Deep domain knowledge & a tight feedback loop between product dev and user pain is how launched in the highly complex health space, growing from 0 to over 100,000 MAUs in months.

The quickest way to get your code into the hands of users.

When everyone is technical and makes great decisions, it's *much* easier to stay on the same page & execute rapidly. This means we have a super short latency from ideation to real usage.

Here are 3 concrete examples with specs and timelines (I'd be delighted to demo any of these to you):

- Jay, built an verticalized analytics platform for Anima with Elasticsearch, supporting advanced features like a no-code query builder (similar to Amplitude) in 6 weeks. He also recently built semantic search and released Annie 1.5, a semantic search enabled, global context aware LLM that can converse and answer any question about any patient in the clinic.
- Alex, a clinical engineer, built 'Slack for medical teams', supporting 1000s of channels per organisation and a real time single source of truth for patient data, in 4 weeks, picking up a large set of new technologies on the way (ground up built from low-level services like Appsync, GraphQL, not Twilio).
- Dennis built a lightning fast cloud document library for clinics in a few days, with <100ms traversals through preloading. Recently, when faced with an ancient legacy API that took 30s to return an array of hits, he hacked together an async indexing service with caching that reduced latency to <2s without harmful race conditions. He built and deployed to prod this in under 24 hours.

If high growth delta and joining an elite scrappy crew is your priority, you're gonna love it here.

Does this sound like you?

- Hungry and wants their shot to change the world - a force of nature when empowered with the tools, resources and development to do it. Sees joining

Anima as potentially their shot to do this, and takes duty to crew and mission extremely seriously.

- Obsessively concerned with UX, and optimises for this when building features rather than arbitrary technical goals.
- Bored and frustrated at big companies; feel held back by red tape, bureaucracy and poor decisions.
- Keen to understand the big picture & entire context of the company and vertical; impatient for growth towards a senior executive role.
- Expert competency in TS, and reasonably tech + language agnostic. Comfortable with key frameworks/libraries like Angular, Node and React. Able to work full stack in JS/TS. Values pragmatism and open discussion from first principles rather than dogma.
- Seeks to maximise not only self productivity, but combined team productivity, communicating the right things at the right time through the right channels (verbal/Slack/Notion).
- Disciplined towards best practice version control, CI/CD and code extensibility. Values 'interface safety' through dimensionality reduction at interfaces.
- Exceptional at 'breadth-first search' through Googling when tackling new challenges, and consistently mindful of local maxima.
- Intellectually curious with a growth mindset - able to tackle entirely novel challenges that lack prior precedent through applying strong CS fundamentals and first principles thinking, creatively using the right data structures & algorithms to solve problems 90/10.
- Familiarity with AWS (APIG, DynamoDB, Lambda, Cognito, Amplify, CloudFormation) and/or hungry to learn.

We don't enforce any particular experience level, but you'll need to demonstrate most of the above through past projects and/or our assessment process.

Our current stack & what to expect from the role

We are tech agonistic, and collectively choose the best tools for the job. We're constantly looking to maximise our productivity and minimise what we call "discounted dev time cost" for shipping features.

We have 2 separate fully functional web apps in prod: one for clinical users and one for patients. Our stack is currently entirely in JS/TS: Angular + Capacitor + Electron, React (internal tools), Amplitude (analytics), a fully serverless backend in AWS (Cognito, Appsync GraphQL, Lambda, DynamoDB). We have good functional & unit test coverage and CI/CD.

Our stack is in a great place already: highly scalable, cost effective, good test coverage, easily maintained, secure and performant with minimal to zero Ops. The product and codebase are stable and loved by our users. We write, test, deploy & ship new features rapidly.

Strategically, we prioritise strong frontend-backend decoupling through GraphQL and strong modularisation of frontend and backend into hierarchical pure modules, with high abstraction internal services and helpers, allowing ephemeral lances (similar to 'squads') to work on functional modules without needing to understand or be overly concerned about other parts of the codebase.

We're looking to add talented engineers who are hungry and understand the urgency and importance of what we're doing for society.

First month - some examples of what to expect:

- Help add further key third party API integrations, including with legacy EMR systems and national APIs like e.g. the electronic prescribing service, allowing Anima to directly issue prescriptions.
- Iterate on a proprietary graph traversal algorithm to improve patient care and clinical value, and increasingly move away from explicit curation to implicit curation by NNs.
- Ship important features that will directly increase delta lives saved in your first 2 weeks.
- Join customer calls to develop a deep understanding of their fundamental motivations and needs/pain points.

Next 6 months - some examples of what to expect:

- Help architect and deploy a scalable & cost effective ETL data pipeline with version control, outputting clean data ready for tokenisation.
- Help deploy our active deep learning training & validation architecture to prod, so that we can correctly eat up our '1.0' systems at the right time
- Build cutting edge products like global context aware chat with semantic search, care orchestration and LLM-enabled cloud telephony e2e
- Hire/scale the team, while implementing the right processes at the right times to maximise discounted team productivity and minimise discounted dev time cost for shipping.

6+ months - some examples of what to expect:

- Potential to transition to a more managerial/executive role. Lead an autonomous lance of elite engineers to fix healthcare and save lives.

- Work with the ML/data team to creatively ideate and ship features to improve ETL pipeline throughput and quality through a data-driven approach powered by analytics.
- This is a permanent role: things get even more exciting down the line!