This Dot Labs

Job Application Questionnaire

This questionnaire was received by Chris Barr on Monday 07/25. The responses are to be considered *the first interview* and were submitted back to This Dot Labs on 7/28.

Where are you physically located?

I currently reside in Swedesboro, NJ, USA within the EST timezone.

We do not do any visa sponsorship. Do you require any? (This only applies if you are based in the US)

Not applicable

What interested you about the position?

I've been following Tracy Lee on Twitter for quite some time now, and I've seen her interactions with the community and the relentless promotion of learning with and by This Dot Labs peoples. It's clear she cares about her team and the reputation of the company within the community. The company embraces, both directly and indirectly a "we can't do this without our people" persona. This is what's most interesting to me about the position - being part of a team with the support of leadership to be better.

What do you do in your current position? What do you like about it? What do you not?

Current Position

Presently, I'm a full time remote contractor for American Water ("AW") - a utilities company based out of the Philadelphia, PA area. The contract is on-going with either side requiring a 14 day notice to the other for termination. During my 18 months with AW, I've built strong relationships with business leads, my manager and skip managers, as well as my direct teammates. I currently split my time between mentoring others, writing stories and coding feature requests as an individual contributor.

My technical day to day consists of working with the following:

- ASP.NET MVC 4.6
- .NET Framework with C# 7
- Vanilla JavaScript (with some jQuery)
- Vanilla CSS
- MSTest, SpecFlow w/Selenium
- nhibernate over Sql Server
- .NET Framework windows services publishing to and consuming from AWS MSK

The UI is a simple standard CRUD form for each type of entity and is rigid in it's design.

Our infrastructure is manually maintained in AWS with 2 load balanced EC2 instances and the software is installed via TeamCity via a manual human process of a human clicking a "Deploy" button.

I also do a limited amount of freelance work in order to enjoy other technology stacks, keep up with current industry trends and learn about other business domains. Current technical areas of focus in this area:

- VueJS 3 w/composition API
- Azure Authentication
- VueQuery
- Tailwind
- VueUse
- Dotnet core backend
- External APIs - Keepa, Apify
- Azure DevOps

What do you like about it?

I've shown that I can organically lead without direct authority - I've been able to act as "the glue" between several technical and business teams, both internal and external to the company. As a contractor, this requires cultivating strong relationships and understanding the goals and motivations of each team, as well as driving alignment to the common goals. This has afforded me an opportunity to take on more responsibility and be accountable for things other than just coding - this sets me apart from the other contractors on the team. I like bridging these types of gaps when I see them and playing the role of an orchestrator among colleagues.

Why are you leaving your current position?

In a nutshell - I'd like to have more opportunity for ownership and take on more technical challenges outside of the .NET ecosystem. While I've been able to extend my influence beyond that of a typical contractor, I am still viewed as external to the company and, in some respects, the team. I'd like to be part of a more inclusive team where I can mentor others, work as "the glue" between teams and have the opportunity to increase my own learnings.

What do you think employers can do to better support their team members?

Listening and fostering a safe haven for personal and team based growth. Including everyone in discussions that impact the well being of the company, it's products and it's people - regardless of experience level, age or expertise in the area of discussion.

People want to know their opinions will be heard. This is paramount towards team members feeling like a valuable asset to the organization.

Where do you hope your career will take you in the next few years?

I hope my career finds me in a nurturing environment that values creativity, expression and learning, where I get to lead by example, learn by interaction with others, and be an individual contributor. I have experience as a people manager a few times over the last 10 years and I think I've finally realized IC is where I'd like to stay. In this track, I'm not opposed to being a *staff engineer* in the future - but I fear my lack of deep expertise in a small set of areas will impede that from happening. That said, I'm quite happy being a generalist, "glue" and/or lead.

What gets you really excited in a job?

Creating solutions to interesting business challenges, with existing or new technology - and being given the freedom to learn, experiment and prototype while being accountable for everything from business idea, design, implementation and support. Having a manager and leadership that supports my journey and indirectly encourages me to do more, to be better. A good mix of technical and people traits.

Are you comfortable leading a team and have you before? Give us examples of if you have and/or if you were to.

Yes - the last 10 years I've had a few positions where I was officially asked to lead or a team, or unofficially lead by influence on my own when seeing a gap.

I have had 4 Development Manager positions and 6 Tech Lead positions - some of which overlap when I was promoted to Development Manager from Tech Lead. Team sizes ranged from 3 to 6 engineers of varying backgrounds and expertise. Reporting structure was either to a Director of C-Level.

I'm currently leading by influence as a contractor with AW and with a small two person team while freelancing. In all of these situations except the latter, I was not the most technically knowledgeable engineer.

All of these positions except AW and current freelancing were on-site and in EST timezone. AW and freelancing are both 100% remote and across all US timezones.

What's important to you? If you had to pick what your top 6 "values" are in life and at work, what are they and why?

- *Empathetic* - I work to understand the feelings of others and how they're impacted by my actions and technical contributions. I'm in-tune with the struggles of those who use my solutions.

- *Comprehensive* - I have a desire to understand an entire system as I work on it, rather than just one technical area or module.

- *Facilitator* - I engage and work across teams to turn ideas into software with a focus on end user experience; I'm comfortable in this role as leader or follower as the situation demands.

- *Adaptable* - I can dig into the trenches with new technology or unfamiliar, existing code bases. I understand that business requirements / visions and focus can change - and as such can pivot effortlessly to deliver to new expectations as needed.

- *Professional* - I strive to do the right thing, understand when compromises are need and I'm aware of my flaws. I attempt to be a better Chris than I was yesterday.

- *Pragmatist* - I seek to deliver quality software as needed, under budget and within time constraints, this requires the ability to be pragamtic, weigh trade offs and make decisions the team, or even myself, may not be happy with. Building a perfect solution is unachievable - but building the perfect pragmatic solution is.

Do you prefer to be told exactly what to do, or do you prefer to work with little direction?

I can and have delivered successfully in both scenarios - however, I prefer to work with little direction, where the guard rails are a little wider and I have the ability to help influence strategic direction. That said, I am engaged, ask a lot of questions, provide ample updates as to status and request feedback from both my peers and direct manager - I do not encourage working in isolation.

Can you rate yourself for the top 5 technologies you are most familiar with - from 1-10? 1 being not at all, and 10 being you could write an O'Reilly book on the tech.

- 6 - JavaScript
- 6 - HTML
- 6 - C#
- 5 - NodeJS
- 4 - TypeScript

Two bonus ratings:

- 9 - Discovery of appropriate memes for any given scenario
- 10 - Googling for help

Are you comfortable in all technologies and would you be willing to work across all technologies? Or, do you prefer to stay in one technology?

I really enjoy working across all technologies and would prefer to keep it that way. Despite being a full stack engineer, front-end has always had a special place in my heart. Across technologies, I've done a little bit of a lot, some examples:

- Modern front-end with VueJS 2/3, React and Angular
  - My preference and most experience is with VueJS but would love to learn and work in any of the modern stacks including Svelte or Solid
- NodeJS
- Azure Services, AWS Services
- Native iOS and Android
- Python / Django web applications and services
- .NET Framework, .NET Core, WPF Windows Applications
- ETL, SSIS

What would you say your strengths are, and your weaknesses?

Strengths

My strengths are covered fairly well under the values question - with the 6th value being what I would consider my strongest trait. I immerse myself in what my customer needs and do my best to get us there under budgetary and time constraints. I'm able to dissassociate myself from the desire to achieve perfection; to step back and evaluate trade-offs and get buy-in from my peers and business leads to deliver a quality product we can all be proud of.

My personality is a strength - I'm agreeable, firm but fair, realistically optimistic and transparent. These personality traits allow me foster strong bonds with my peers, leadership and customers. Many times, privately, others will seek me out and give me kudos for being the voice of reason, the bouy in the sea providing safe harbor, or the 'happy one'.

Another strength worth mentioning is my interest in helping others understand the things we do through creative story-telling - the most recent of which was helping my business partner understand the concept of object abstraction and instantiation via a story about a fruit factory.

Weaknesses

I can get caught up on terminology or the explicit usage of phrases. I analysis the meaning behind words to a large degree and wind up in analysis loops. I eventually find my way out of the loop but sometimes confuse others as I try to unconfuse myself.

I lack deep knowledge in any particular technology - as such I'm a generalist. I've always learned by doing - by implementing solutions to business challenges - usually volunteering for it with new technology stacks or approaches when the opportunty presented itself. I have a hard time focusing on thick books, or long form videos that dive into deep concepts. This weakness sometimes limits me as a desirable option when engineers are being selected for new work.

I don't know a lot of academic or technical concepts off the top of my head - nor do I have an interest in them. For example when asked about design patterns, I may freeze and have a hard time explaining or implementing from scratch - but give me a short amount of time and I'll figure out how to do it, come up with my own opinions on if it's something valuable or not given the challenge we face, and implement if applicable. This weakness portrays me as not knowledgable on the given topics and may lead to lack of my engagement in the future.

Give us an example of when someone told you to do something that was technically wrong and/or you disagreed with the architect. How do you deal with the situation?

At AW, we work with and rely on various teams who specialize in other areas, one of these teams is called DevSecOps and they're responsible for building our CICD pipelines in AWS. I was engaging with them for implementation of a new pipeline for a docker based .NET Core API and docker based Angular front-end in a GitHub mono-repository. Going back 2 years prior to this engagement, the DevSecOps had built generic pipelines for use by other software engineering teams in the company - all of which were Java/Angular based. These pipelines were battle tested and in maintenance mode but lacked some features my team wanted to implement:

- Tagging .NET libraries and Docker images with a version generated from Directory.Build.props + build number
- Setting environmental build variables such that our dockerfile and Angular environment files could bake in a version number created from package.json version + build number
- Running .NET unit tests, generating reports and dropping them in an S3 bucket so developers could review
- Building, testing, versioning and publishing .NET libraries to AWS Code Artifact so that other pipelines could consume them
- Triggering builds for individual projects in the monorepo when they change as opposed to rebuilding all projects in monorepo when any file changes
- Promoting build artifacts through environments and applying environmental configuration at deploy time, instead of building after reacting to a merge commit in an environment specific branch (with configuration in source control)

We were told very specifically that every one of these items except build promotion were not best practices. Additionally, for every one of these items we were told were not possible with AWS Code Pipeline.

I have prior experience with Azure DevOps (VSTS prior to it) and TeamCity/Octopus Deploy and I knew this person's analysis of our request was wrong - so how did I deal with the situation?

I had a Teams call with the lead DevSecOps teammate and expressed my opinions on how these were considered best practices in both .NET and Angular. I referenced AWS Code Pipeline documentation pages where each of these items is discussed in detail with examples. I intentionally did not reference any blog articles or opinion pieces. The outcome of this first meeting:

- Agreement to implement a versioning strategy in the API and front-end
- Generation of reports from both project test runs was not possible with AWS Code Pipeline
- Promotion of build artifacts is highly sought by teh company at large and is on the DevSecOps roadmap for 2023 (this discussion was in late 2021)

Having seen the AWS Documentation of generating test run reports and exposing them via S3 from a link tied to each build run, I knew this request was *not impossible*. I used this as an opportunity to try to lead by example. Over the next few days, I met with my manager and got permission to implement this in an AWS sandbox environment, fully documented my approach step by step with pictures and reference links to AWS Documentation, submitted it to the DevSecOps team, my team and the skip manager overseeing all of us. After a few weeks we were told the proposed approach was not possible with their generic implementation of pipelines and that it would require custom work by their team, to be prioritized and completed within 6 weeks. In the end, we were given a custom text only based solution which allowed us to review what tests passed and failed and not the reports we had requested

What do you think the hardest part about working remotely is?

The hardest part for me working remotely is recognizing intent and absorbing emotional context during my interactions with colleagues. There are subtle (sometimes not!) physical mannerisms we humans go through when communicating with each other which provide context to help our audience understand intent or become empathatic to the words we speak. In a remote environment, it's easy to prefer async communication over a text-based medium (e-mail, Slack); and the burden is on the reader to assume good intent and not infer emotion. Video conferencing can be really difficult for some to do; the lack of which can make it difficult for the audience to understand intent or infer emotion without those physical social cues.

For this reason I make it a point to always turn my video on during calls even if I'm not leading the call or speaking.

How do you plan on working remotely?

I have worked remotely for multiple companies over the last 13 years in both individual and lead positions. I have a dedicated office in my home with 3 monitors, a gaming rig as my workstation and lots of plush toys. I over communicate my status to my peers and leadership as well as actively engage in in "general" type async channels in Slack / Teams. I try to bring a aura of fun and question asking to these channels to entice others in join in; to create community - I understand not everyone is interested in participation and can be self aware enough to know when I need to disengage.

What is something that you find especially annoying about working with people?

This is a tough one to answer, because the word "annoying" is ... well annoying and not something you want to write about when applying for a position where you need to work harmoniously with other people. When coworkers commit to doing something and do not do the thing they committed to, or do not communicate a change in plan - this is especially annoying to me. We're all working together to design, build and ship software. Hopefully, we don't have "micro-managers" requesting status and directing traffic multiple times a

day - and for this reason we all need to hold ourselves accountable for the things we say we'll do, and when we don't or can't do them, need to relay this information to our teammates so they can assist or prepare for any alternative outcomes. This is something that I don't think is acquired over time with professional experience - I think it's something that is acquired as we grow up and are influenced by environmental factors and the relationships that we have been built in early life. For that reason, while annoying, I am still empathetic to the situation, understanding and try to lead by example by over communicating what I'm doing along with ETAs if applicable for any team members dependent on my tasks at hand.

What if you become really frustrated with a teammate? What are you going to do?

Communication. When I realize I've become frustrated with a teammate - I attempt to remove the emotion and see the situation through the lens of an observer. I will mentally go back through time and replay the interactions we had to diagnose how my emotional state of mind came to be then I'll reevaluate. Direct communication with the teammate almost always resolves these emotional states, regardless of how they came about - the communication should be neutral or empathatic and without humor or self deprecation - it's easy to blame ourselves in times like this in an effort to 'just get beyond' the situation - but it's more important to set clear boundaries; to be vulnerable and admin fault and apologize as needed. If this does not resolve the sense of frustrated, or the situation worsens then I'll have a discussion with my manager in our next 1:1. I'll try to be objective and discuss what I perceive to be both sides of the story - hoping to get direction on an approach for remediation.

What are you looking for financially?

My contract rate with AW is $120 per hour, while my rate for freelancing is $90 per hour. The discrepancy is due to freelancing being part time and secondary income, along with leveraging technology that I enjoy working in. Aside from those explicit numbers, I'm aware of what the current market rate is for someone with my skill set in the USA.

What does This Dot Labs believe is fair compensation for this role?