

Hi all,

I'm a local Application Developer with career experience in programming and databases. I'm coming off of a very long-term training period for learning new technology and expanding my skill sets to upgrade to the newest programming languages, such as Rust, as well as learn technologies relevant to the entertainment industry such as the field of 3D including both programming and content creation, VR/AR/XR, music composition and sound effects, AI/NN, and video editing. I wasn't expecting my training period to last more than a year, but technology raced, and I was transitioning to a new area of computers - entertainment, which is a huge transition in and of itself. I'll be the first to admit, there's a lot I haven't touched yet, and at the same point in time, my mind is so full of technology, it's hard to keep it in. This was a 6 year train for me with only 2 months off total. I'm in a whole new place with my skill sets, but I'm not going back to the corporations, the government, or the consulting companies. I'm just offering up complete solutions directly to small-to-medium sized businesses instead. I don't really care about the ownership structure of the business. Whether it's owned by a family or a holding company doesn't matter to me, but I do prefer working for relatively small sized businesses (the people are more friendly...). Initially, I planned on keeping this pitch as simple as possible, however, it's the type of thing that brings forth lots of questions, so I decided to answer most of them in this document. Sorry for it being so long. It's a new field and there's some explaining needed. I'm not a writer, nor an editor, so please bear with me in this document.

I'm seeking to develop projects for businesses who are interested in VR headset entertainment solutions in order to increase your customer base, as well as maintain existing customers. I'm also willing to generate more typical computer gaming or "3d sim/experiences". Meaning ones that can be played without a VR headset (including installed applications or web applications to desktop computers, laptops, phone, tablet), because it still is early in the days of the headsets, and not everyone has one. The next version of the VR headsets is likely when a lot of development picks up, because the devices will be good enough to lure more buyers. It doesn't necessarily hurt to be ahead of it, and I'll describe some reasons why in this pitch. Your game or experience will automatically improve with the next device as the passthrough improves. There are also options on the passthrough which I'll discuss throughout this document, but part of that is getting the Quest Pro to get a better passthrough experience, though it does cost twice as much. It's early, and the passthrough on the

standard device - the Quest 3, is pretty poor. That's just where the technology is at, so I could understand completely if you want to go with a solution that doesn't involve a headset. That said, most of this document is written up to be geared towards a VR headset project, whether Virtual Reality or Mixed Reality. If you want to do a standard computer game, most of this document will still be valid in answering a lot of your questions including costs.

The ultimate truth is that my skills won't be needed much longer due to advancements in AI, but I'm just trying to be out here contributing like the rest and this is what I do... And specifically I'm talking about AI doing all the heavy lifting. We'll just "tell it" what to build. At this point in time, developers can use lots of AI tooling to build out the various bits and pieces including a lot of the code, and most of the assets, however, it won't do the entire thing yet. You still need to sit down and make the game. In the future, you'll just tell it what you want, and it will generate the entire thing. Then you'll tell the AI program what changes you want, and it will make them... No programmer needed. No artist needed. Just a creator/director/producer.

What are you offering up, buddy?

My current and discounted offer is a 3-month contract for \$24k for a VR/AR/XR entertainment solution, being either a game, or experience. After this initial offer, my rate will likely be closer to \$40k per 3-month period going forward, so this is quite a discount actually, and likely 5x less than you'd get from any company with more than 1 person, if you could actually find one at this point. It's still really early for this technology even though the parts and pieces are mostly there from a development standpoint. From a device standpoint, it's okay at this point, but will get much better. That said, the Meta Quest 3 and the Meta Quest Pro are fairly decent at this point. They aren't near as good as the one from Apple, but not many are buying that due to its price.

Can you give me a terminology primer?

Yes, and it's a little bit of a confusing story. They like it that way. It keeps your head spinning...

The confusion they laid down is adding in this term "Extended Reality", which is said to be a term that encompasses all the various top level technologies used in VR headsets - being Virtual Reality, Augmented Reality, and Mixed Reality. The term Extended Reality started taking the acronym XR which was previously used for Mixed Reality. Some people keep saying XR for mixed reality and others

started saying and writing MR for Mixed Reality.

So, let's get to the terms:

Virtual Reality (VR) - this means that you're immersed inside the game and there is no reality coming through. Complete immersion means you are wearing a VR headset. Even if that headset is based on a phone. I mean, you CAN do it on the phone without wearing a headset extender thing, but it wouldn't be a great experience. There's no problem with this type of game at all, but it's more geared for indoor gaming where a person is sitting down or standing mostly in place. If you plan on having the people play a game that they would play from home, then this is the type of game that you should choose. Virtual Reality adds a lot of enhancements as compared with a regular computer game, because of how you interact with things much more realistically than a standard game controller, allowing you to swing your arms to hit something, for instance. It's not quite as cool as Mixed Reality in some ways, but it has the advantage that you can play from anywhere.

Augmented Reality (AR) - this technology is pretty much like "Pokemon Go". There are things being displayed on top of the camera video on your screen, and they show up based on your location, either inside a structure, or outside in the real world. The items displayed are often based on your GPS coordinates, and they might display additional information about the buildings and historic sites around you. This can be done on a VR headset or even just a phone. But the phone experience isn't so great, so it's mostly going to be a headset thing going forward. The AR for phones is really kind of a starter market to allow developers to learn the technology while the headsets are still being developed. I'm not really doing this. It's mostly for cities, tourist attractions, and stuff like that. It's not really for entertainment, but for displaying information about real world things, and/or interacting in some way like booking a nights stay at a hotel you're driving by simply by clicking a button that appears on the hotel, which also shows you a price.

Mixed Reality (XR or MR) - mostly for outdoor gaming, though it can be for indoor gaming as well if there is enough space. This allows reality to come (camera passthrough) through but allows you to add in additional things that really appear to be part of the reality. They don't just display on top. They can run

and hide behind your couch, for instance. When done properly, it will be close to hallucinating... If the lighting and shadows are done correctly - it will be hard to tell what is real and what isn't. When I use the term XR throughout this document, I'm referring to Mixed Reality. Think of users running through a field playing a video game and you'll have a better idea. Chasing zombies out in the field for instance. Or skateboarding while playing a video game. It's only limited to one's imagination.

Extended Reality (XR or it doesn't really exist) - this is an "all encompassing term" meant to mean that you're basically wearing a VR headset or glasses and that you are having some experience that at least enhances reality (AR, and Mixed Reality) or totally destroys reality (VR).

But Extended sure sounds like Augmented, doesn't it. And it sure seems to promote the feel of both Augmented Reality and Mixed Reality. We're extending reality. But yet, they made it an all encompassing term that they also threw in as part of the VR/AR/XR set of acronyms... Clearly intentional. As someone that works in this field, let me tell you, this is the confusion they lay down.

Here's the thing. They use the set of acronyms listed as VR/AR/XR all over the place. If extended reality is an encompassing term, then it doesn't make sense to list it out in the set, does it? It should be VR/AR/MR if they're going to list all three types.

Tell me about the overall project process:

You'll get to pick a game type (computer/VR/XR - XR being mixed reality), a theme/plot, a rating, a location, a style, whether it needs to be multiplayer, and if there's an "end result" (such as whether or not they win a prize/discount). I'll also want to discuss your motivations, of course. Why are you creating this game in the first place? That will play heavily into how I develop the game and/or experience.

After that, you'll just need to let me loose, to go do it - no further specifications. No project management. This is the way we get it done for \$24k. I'll have to run from day one, and I can't keep going back and changing things to someone else's detailed specifications and get it done in that timeframe. For \$24k, you have to give up some control. That's my niche. Nobody else would possibly do it for this price. Let me work something for you - managed only by myself, and you'll get it cheap.

Note that when I say “computer” above as a game type, I just mean anything that doesn’t require a VR headset, such as desktop, laptop, tablet, or phone. I realize the headset is a computer btw, but you know... Note that non VR is a valid choice though most of the rest of this document will be about VR headset development and actually mostly XR development, and when I say XR, I mean “Mixed Reality”. I just need to reinforce these terms a few times before we move on (sorry). Most of the document is relevant for both computer entertainment or VR headset entertainment regardless.

Wow Jeff, how nice of you to let us select something in our own project?

Trying getting it done for \$24k the other way where you specify every little detail - impossible... My niche is providing solutions to those who are turning a profit, but not necessarily doing great. They are seeking more customers. And to do projects for this cheap (and it is cheap) requires constraints. But, I’m out here offering up VR headset solutions to small businesses whereas very few else are doing so.

How do you expect us to come up with that money? We’re barely in business.

I simply won’t try to sway anyone in my direction if they don’t feel that it would be either financially feasible at this point in time, or simply not give a good enough ROI over 3 years to be worth it. It’s all going to be dependent on whether or not you start picking up new customers that keep coming back year after year. And that could be based on your overall strategy to gain customers.

Can you provide a few factors to consider in profiting from this venture?

- 1) The purpose of the game - is it just for fun, or is there a learning experience involved?
- 2) Where is it going to be played?
- 3) How often will it be played?
- 4) How to get people talking about it?
- 5) How to keep the people interested in it?
- 6) How often will it be available to play?
- 7) How do you plan on increasing your customer base (if that’s the intention)?
- 8) How will you keep your business in their minds?
- 9) Will the game be “team based” where teams get together to play against

each other online or onsite? They really might like playing as teams. Even just branch employees playing against each other might be of real value to some companies (team building).

10) Will it be for the customers, for the employees, or both?

Of course this is just a starter set of things to consider and each business will have their own consideration, but I thought I'd just note a few considerations to get you going.

Will there be limitations?

Of course there will be limitations. This is the niche I'm filling. Getting a good thing done at a good price, but without governance in any way. You just go let me do it, and I get the most important stuff done first and keep going. There won't be feedback with you. The feedback loop will all be myself. I'll look at it, test it, see what sucks, and change it - all in a minute. No need for meetings, or 3 different opinions on every possible topic. For this price, I'm not going to be "storing users data", sending them emails about their game score, or emailing them screen captures of their game/experience. All the little things that some might consider nice to have, but aren't necessarily all that worthwhile. It's simply a must to exclude all these unnecessary things like this to get a small business project done. I'm trying to bring a price that almost any business can afford. Any business turning a profit anyways. And the reason is that the business you get from this will last and others will keep talking about it thus keeping your business in their mind. The fun they had. Part of their life stories.

I don't think people are going to want to put on a headset that others have worn.

They make disposable inserts that people can wear.

If you want to see what's available, do a web search for Disposable VR Mask Sanitary VR Eye Covers bulk. I found a product listing with 200 face covers for \$27, which is pretty good imo. That's only about 8 cents each - definitely affordable.

Why VR/XR when only 20-25% of US households have a VR headset?

Because it can be a much greater experience, and some might go out and buy one in order to be part of this. That said, non-VR headset devices have a much bigger reach right now.

Which one is right for our business:

1) **VR** is good for storefront type businesses because your customers won't be there long and can play at home - likely at designated times in order to have teams play against each other. The downside is that only 20-25% of US households have a VR headset (typically the Quest).

2) **Mixed reality** is good for businesses where there is a decent amount of property to create an outdoor game.. For example, every sunday at 6PM we play this game on our property if you want to come play. Could be prizes (or not). However you want to do it. That said, restaurants could certainly do inside VR games as well.

3) **Non VR headset games** (computer) - good for any business. Largest reach because most households have a computer of some sort - either a desktop computer, a laptop, a tablet, or a phone. Note that you would either have to choose one of the 3 scenarios below (because they are each different)

- a) web deployment - could target all devices
- b) installable application on desktop/laptop
- c) installable application on tablet/phone

The downside to this type of game is that they don't get the same experience that they would in a VR headset game where you are immersed in it.

Tell me more of the theme:

A theme might be something like "save a bird with netting stuck in its beak on the other side of the canal by climbing boats that are passing through the canal". Note that Mixed Reality games mix reality with non reality, so, the players could be very active in the game physically. For instance, they might have to walk or run through a field and go out and find things or conquer various challenges. In the example above, the player might have to walk along the side of the canal (or fake canal) in order to see the game character which might be obscured from view if the real-world player stays in one spot. It's only limited to your imagination. The length of the theme might be a sentence, or a paragraph, but not a full page, and certainly not a 27 page document detailing every little thing.

Tell me more about Mixed Reality technology.

When your computer game enemies start running behind real world trees, things get interesting... Mixed Reality really opens up a whole other type of computer gaming where someone could be playing a soccer game, for instance,

and have their VR headset on and doing additional things, such as if they shoot a goal AND the ball goes through something on the VR headset, they get additional points. I'm just trying to give you a feel of the technology. It's basically like hallucinating in the real world. You don't have to be limited to a certain "playing area" either like in VR. You can wander around anywhere seeing mostly the real world, so you have to think in terms of the "real world" with game objects mixed into the camera feed. These objects don't just show "on top of" other things. They can be partially or fully hidden behind them. The objects really integrate with the environment (or should if developed well) rather than simply "floating" in front like you may have been accustomed to from Pokemon Go.

How is the quality at this point?

The "passthrough" quality (seeing the real world) is still coming along to be perfectly honest. There is a setting to get better passthrough, although that limits the amount you can do in a game with heavy calculations. Keep in mind that not all games have heavy calculations - many do not. But these are just the things that need to be worked out for a particular game - whether or not you'd want higher passthrough (camera) quality or you want to leave more compute power for the game itself which may have a lot of game objects interacting. Not all games will need good quality camera passthrough. Think of an outdoor game intended for after sundown - then you could use a low quality passthrough setting and get high performance for game objects. Or for a daytime game, then you can use a higher passthrough quality setting but less game objects on the screen. These games are very much do-able right now if you manage it correctly and don't overdo it. You just have to make some degree of trade-offs.

Guarantees and Requested Payment Schedule

Before I accept the first payment, I would bring the solution out to show where it's at and how it's coming.

If, at the end of month 1, I can't meet some technical challenge that I thought I would be able to,

then we'll just scrap it - **no payment needed**. It would be my bad at that point, and I'd know by the end of the first month, so it wouldn't be a big deal for me to scrap it, and you'd be off the hook completely.

If I do meet the challenges that I need for this entertainment solution to be viable, and I do have something to show at the end of the first month, specifically that I was able to meet technology challenges, then the first payment is expected

at that point in time. If you're new to technology and wondering why I wouldn't be able to, it's because the tech changes on a daily basis, and things are not always compatible... You can't always predict these things, but I won't charge if I run into issues. After that point, it's mostly going to be about actually developing the game which means all of the 3d content, animations, audio, game/experience interactions, video content, etc.

The other 2 payments would continue as monthly payments - 60 days out, and 90 days out from the start of the project. Note that in order for the game/experience to be successful in drawing people in, there will need to be some amount of advertising, though not necessarily much. You might consider having some free t-shirts for people that won a game or completed some experience so that other people in town take notice. I personally think that's well worth the cost of the t-shirts.

Tell me more of the development process.

The way I'll accomplish "getting it finished" depends on the type of game. But, let me just give you an example so that you'll have an idea. For some games, there might be a natural segmentation, such as a "scene" or a "level". When working on a project like this, you wouldn't generally predefine 10 scenes before you start on the first. You have an overall plot and you make the number of segments variable. In other words, if I'm able to develop 6 segments in those 3 months, then the game has 6 segments. If I make it to 10 segments, then the game has 10 segments. These projects have no way of coming close to knowing how long something will take to develop. That's why the concept of the "agile" development process came about. Understanding agile is simple - it's like what I stated above. You get the inner workings done first. The things that are absolutely needed. Then you start building it out and add highest priority things first and you seek a "working solution" as quick as possible even if it's not ideal. Then you continue forth working on the highest priority items first, which in the example above would be completing the next scene. That way the project has a much higher chance of being completed. You don't want scrapped projects... In a typical agile project, you'd request feedback at a fairly early point in time. For my projects, I'll be doing my own feedback, because it will be fully managed. It's a loss of control, but it also makes it easier for you because you don't have to worry about it.

Every project is new, but I do work hard, and very rarely have a problem accomplishing what I sought out to do. If one solution to a challenge doesn't

work, there's always other ways to accomplish the same thing, or close to it. I'm seeking to use each game I develop as a showcase, so I myself want it to be as good as possible too.

Will you be using AI / Neural Network based tooling?

Yes, I do plan on making heavy use of AI tooling for this endeavor, such as text-to-image, text-to-video, text-to-3d, text-to-material, text-to-audio, and others. This stuff is getting better and better on a daily basis. There's always something new coming out every single day - hard to keep up with as a full time student.

I should be able to get a fair amount done in 3-months with modern AI tooling - it's night and day compared to what could have been accomplished before AI in 3 months.

I'm not a 3d expert, but I am very capable - and feel 10x more so with ChatGpt, Github Copilot and other AI code assistants. I have very little concerns about meeting any challenges needed. I actually did very well in math in school having 3 semesters of calculus in college for my chemistry degree. It's not ALL fresh in my head, of course, but this is where ChatGPT and others help out BIG. You can just tell it what you need on the math front (and programming) and it will create a function for you.

I know I can create XR solutions that would be very fun and engaging as long as I have space to work.

We can easily generate good quality AI video using RunwayML Gen 3, Luma "dream machine" which is looking quite nice, if video is part of your solution. The text-to-3d, for easily creating 3d objects, is getting better quickly and it's status is "decent" at the moment for most things, especially anything not right up in the foreground. That means 3d objects and scenes can be developed much much faster than in prior years, though you won't always get exactly what you want, but that is okay for background objects.

What costs would be needed outside of payments to you?

1) VR headsets. Right now, I'm only targeting the Quest 3 because it's affordable. You'd need to buy a headset for each of the people playing at a given point in time regardless of whether the game is multiplayer or not.

There 2 versions of the Quest we would use are: The Meta Quest 3 and the Meta Quest Pro.

It depends on the particular game needs as to which one you would need.

The Meta Quest 3 is : \$500 per headset

The Metal Quest Pro is \$1000 per headset

I do want to note that the technology is young, and it will get much better over time, but it's also good enough to create some really fun interactive games and experiences to use right now. The solution I create will work for **future Quest headsets** and possibly other headsets as well. Many will keep using their solutions for years, and it will simply get better automatically when the next headset comes out.

You might only need a solution where 6 people can play at once, and if we go with the Quest 3, then it's only \$3,000 for the headset cost. You might have a game/experience that's only 3 minutes long that let's people play one or two at a time, so headset costs are just dependent on how many simultaneous users. For a bigger venue, this may be up to 20 users, thus headset costs go up.

2) Generative AI costs - I'll be using a lot of AI in this which will SAVE tons of money and allow much bigger more involved games than without using Generative AI. I'll be using it for as much as possible, but I will use the least expensive ones, and we will put a cap on the amount that can be spent here - you decide. Perhaps up to \$2k might be very well worth the money.

What if they want to bring their own VR headset? (yes, but...)

It's going to depend on the game requirements, but this is possible. We can now load VR/AR/XR solutions from a website. For instance, when you visit a website in a 3d headset, you can launch a VR/AR/XR headset from clicking on a link on the webpage. Not just for VR but for AR/XR as well.

It's estimated that approximately 20 percent of US households have a VR headset, but I don't know how many are the Meta Quest 3 or the Meta Quest Pro. For now, I'd mostly say that it's likely best just to plan on buying VR headsets.

That said, there are some differences in the technology if you launch from a website versus having the application directly installed on the device (side-loaded onto it - ie, not via app store). Installed applications will yield the best performance which might be beneficial - especially for XR games where you have the camera passthrough taking up more processing power.

While you could side load the application on their headset if they bring it out, I'd recommend that this is not the solution chosen. It would take time to install it, and we don't want any liabilities...

So, overall the answer is maybe, but that I'm not recommending it overall, with a final statement that in certain situations it might be a fit. So, I'd just suggest

buying all the headsets you'll plan on needing to use in most cases, and perhaps limiting that to 20 or less at a time using the headsets.

What if we want our solution at more than one location?

This would need to be looked at on a case by case basis.

I would generally say it's likely to be about \$6k more per site, but it just really depends on the game, the location layout, etc.

I would suggest that as a price for a game that needs to have things positioned differently in a different space for each additional location. This of course requires not only work, but also lots of testing at the new location as well as determining which interactions need to be changed and how difficult it might be. It could be somewhat easy or very hard depending on the game/experience. It's not just moving things around. It's going to affect all the interactions and animations. I might just have to say no in certain situations, but typically it would be a yes, and for a reasonable cost. This would basically be done after the 3 month project of the initial location where it's deployed, and would likely be about a month per location to finish development, but only really willing to do if just 2 or 3 locations. Otherwise, for those with more locations, their employees would need to learn how to rework it for the other locations.

Are these solutions better for “year round” entertainment, or an event?

Either. I want you to use your imagination as to how it could benefit your business. I mostly envision entertainment venues where it gets people talking about and remembering your business, or even enhances an existing entertainment venue, such as mini-golf.

Are you going to bring us any possible ideas?

I'm certainly willing to, but not unless you ask. I want you to dig up something most relevant for your business and location first. Look around. See what can be done outside in the vicinity around your business. Just get me to a theme. An overall plot. It's endless... Some random thoughts that are generic might be something like a rainforest experience, a haunted mansion, a “who done it” game.

What technologies will you use, and will we need to license anything?

My options right now are mostly:

Unity, Godot, Aframe/AR.js, Babylon.js, or some early level Rust (Bevy) stuff. If we side load the application, then I would use Unity, Godot or Rust since they can build installable applications that have performance benefits over WebXR (browser based) games/experiences.

But I'm not limited to this set of solutions either. I can also use an android library called ARCore (using Kotlin language), which is Google's platform for building Android based augmented reality and mixed reality experiences. The Quest uses Android as its underlying operating system. There are additional other solutions out there.. It just depends on the project needs as to which I think is the best fit for that project as far as the functionality that is provided. Using any of these frameworks is within my existing skill set. I've studied up on all of them, and could easily use each of them. Each has pros and cons, and I'll decide based on the project.

The only licensing that would be needed would be if I decide to use Unity which would just be a developer license while it's being developed, and that's only approximately \$400/year/developer during active development. During my development, I'll pick up this cost if I use Unity.

I will be choosing the technology based on everything I envision and am not allowing clients to make choices regarding the chosen technology. There are lots of things to consider.

Choice of technology will simply depend on the needs of the project and what advantages that technology brings forth over the others for your particular project.

Will we own the solution afterwards - the code and everything?

Yes, the solution will be yours and I will even include thorough documentation for it.

I'll have you create a Github account for the business and I'll add the code to a private repository.

You can have a free account for small code bases like this, so no worries on cost. I'll document the account during the documentation that I write for the project.

Can we have one of our employees work on the solution with you?

Unfortunately no. Training eats into necessary work time like you wouldn't believe. They will be able to read the documentation at the end and understand how the project works, and will be able to dig into the project and change it over time without issue IF they have already done their technology training. It's a very

long train in this particular field, so most likely best for another computer professional to take over some time down the road rather than having someone that isn't trained on this technology try to work on it at some point.

I know this guy in computers. He's looking for work. Can he work on it with you?

Again, unfortunately the answer is no. Not for \$24k. Put me on a project with 6 other developers that has an actual real world budget along with it - that's great. Small business solutions are different. You have to be in the software development field to know where this answer comes from. 95+ % of people will hear this answer is that he doesn't like being part of a team. But that's just not the truth. You have to have worked on a software development team to understand. There are literally at least 10 reasons why I wouldn't do this, and it's not because I don't like working with others. I'll just state a few without going further. 1) I don't really know them and others don't know how they'll work with me - regardless how you feel they would, 2) we all know different technologies, and we barely understand each other's technologies, so going down that road means someone is learning new technology during a project, which never works, 3) so many decisions and everyone has their own ideas, which yields a lot of combat and you don't end up with a unified solution, 4) most partners will do about 25% of the project (not very well), and expect 50% of the pay, no matter how much their friends talk them up... This is a short list of 4 reasons... When you're in the computer field, you understand where I'm coming from. Partnerships, even project specific ones, are really hard, and often just ruin the entire project. Even just having a person who interns and works for free doesn't work out well for anyone in a small business project.

We use "xyz business" for all our computer work. Can we let them manage the project? I already have a working relationship with them.

Definitely not - for most of the reasons mentioned above. They would get in the way and likely wouldn't help in any way. And they would want to micro-manage the project which is precisely what I'm not allowing for this price. Lastly, they are unlikely to understand the technology at all.

Tell us more about your background.

I'll send out a resume on request, but the overall gist is that I worked for many years as both a desktop application developer and web application developer

with a focus on applications that had lots of interactions with databases, such as creating database schemas, database stored procedures, writing import/export and transformation scripts (typically sql), creating user interfaces for applications (desktop and web), creating back-end processing for applications. These are just some of the types of things. My last job was actually nearly 6 years ago now (not quite yet). This was working on a client project for Ciber/HTE (HTE bought out Ciber). The client project was ThyssenKrupp Aerospace. I had actually worked on the project before that and went to training for a bit as technology had already started running. Our project over there was dwindling unfortunately as the client was converting to an SAP system (that our company wasn't part of the development). So our team was getting cut month by month. After I got let go from the project, I was still part of Ciber/HTE, but also saw all the technology running faster than I was able to keep up with and still work. Today, I'm still training. Almost unimaginable, but that's the way it is in 3D, and then you add in all this VR/AR/XR and all the AI/NN on top of that. Plus all the programming languages changed and there's a whole set of new databases that are quite different than the old ones. That's how crazy it is right now. Granted, I did bite off too big of a chunk really, but if you don't, you just get lost in it. And if you don't, you have to wait for a job to open up rather than go offer solutions directly. I think 95%+ are lost in it right now because so much came out while they are working. It's impossible to keep up with while working, unless you're just not busy there...

Where would you work?

I'd work out of my apartment 95+% of the time. The only time I would come out is to test the game out there on site if you are choosing to do a mixed reality game. Otherwise I would work 100% from my apartment and just meet up with you for a few meetings to test it out with you in person even though it's not outdoors.

Let's hear a conclusion - wrap it up, WRAP IT UP!

It's great the AI machines will build it all for us soon.. Some day, not too far out, building a game or entertainment solution will just be a matter of walking around with the VR headset on and saying, put this here, put this over there, when the ball hits this thing, perform this action, etc. You'll just build the games by directing it. It's probably not too far away with the pace things are going. But, as of yet, that's not the case, and there's no telling exactly how far out that day is. Let's build something fun together and increase your customer base.

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