Transcript Dr. Harvey Castro

Hall T. Martin: [00:00:00] Well, hello, this is Hall Martin with Investor Connect. Today I'm here with Harvey Castro, author of the book Chat GPT and Healthcare Chat, g p t. And healthcare is a call to action for anyone looking to improve healthcare access and drive change in the healthcare industry.

Harvey, thank you for joining us.

Dr. Harvey Castro: Awesome to be here. Thank you for having me.

Hall T. Martin: Where are you calling from today?

Dr. Harvey Castro: I'm in Dallas, Texas, so not too far from you.

Hall T. Martin: That's right. We're here in Austin, so we're on the same I 35, but glad to connect with you today. before we kick off, let's talk more about your background. what did you do before this?

Dr. Harvey Castro: Yeah, I'm a ER board certified physician and serial entrepreneur. So before this, I pretty much feel like I've done a little bit of everything from, uh, creating my own vitamin label to over 30 iPhone medical apps. To having, uh, you know, this entity, the freestanding market, I created over 20 freestandings in the state of Texas.

and my recent one, was called Trusted Medical Centers. We had eight locations and I sold all those, uh, a couple years ago.

Hall T. Martin: Well, great. Well, you wrote the book, uh, [00:01:00] chat, g p t in healthcare and, uh, just wanted to see what inspired you to write this book.

Dr. Harvey Castro: Yeah, it's a good question. So literally I was holding, let me go back to my story. I was in the emergency room, literally had my first iPhone and I was coding a patient and at the time, I noticed that the nurse, when I asked her for certain medication, she basically, uh, had to go through a textbook, thumb through it, find, find the medicine and give it.

And I thought in my mind, huh, there's gotta be a better way. So I literally created the first iPhone, iPhone IV meds app in the world and it was called IV Meds. And the reason I like sharing that story is cuz fast forward many, many years later, uh, that was iPhone one, obviously I think we're at the 14.

And, , I was playing with chat G P T, and I think I lucked out. I happened to be playing with it just when it first came out and when I was playing with it, I thought, huh, this would be a great tool in healthcare. And I got so excited that I literally started writing a book about how could [00:02:00] this be used in healthcare?

and literally I got it published by January the third, fifth, somewhere in there of this year. And so, my passion in healthcare and technology is huge, and I thought this would be the perfect tool that I can help teach patients how to use it and then teach, uh, other doctors and professionals how to use it.

Hall T. Martin: Right. Can you tell us more about the book? What exactly do you cover in it?

Dr. Harvey Castro: Yeah. Uh, the first book, uh, it's kind of 10,000 feet high. I, I'm going over different applications from like clinical trials, patient education, how doctors should see it, how patients should see it. it's like I said, really 10,000 feet high. The second book I've really go into, into the weeds of kind of going through screen by screen, how it could be used, and then I go through all the, what I call the good, the bad, and the unknown.

Meaning, there's things . That chat PT can do that if patients don't realize can actually can cause harm. And so I go through all the, what's obviously called the hallucination effect and [00:03:00] going to the ethics and biases of it. so there's just so much material to cover, but uh, the way I see it is every month I feel like I want to add more.

Adding, I end up finding another area that's brand new. For example, Chat GPT 4 came out and I'm literally working on the cover. So my goal is to have a book out next week that covers, all the different databases that are coming out, like Bard and G P T, and Bing and, all these other things that are out there that's gonna influence healthcare.

Hall T. Martin: Great. And well, who is the primary audience for it?

Dr. Harvey Castro: Yeah, good question. honestly, some of the books, the way I wrote them, are different facets. Big picture. I write the first one mainly for

doctors, the second one for any type of patient. The third one is more of a healthcare slash weight loss, biohacking your weight. And I use it for those individuals that are trying to lose weight to help them use Chat GPT to leverage that power in losing weight.

And then I become addicted to this. So now I, as a serial entrepreneur, I thought I [00:04:00] need to have a book on entrepreneurship. So I literally, this last week, I I released a book on Entrepre

Hall T. Martin: Well, great. Well, it looked like the book could also be used by those that are developing chat G p T products for the healthcare industry. I saw a lot of applications and how it could be used, and I thought that would be very helpful to those building the systems. Are you targeting them in any way?

Dr. Harvey Castro: Oh yeah. I, think, my wife will say, I'm nerding out in the book, and I talk about a lot of, the geeky things that are probably really advanced, but I honestly write it for those people that are programming or thinking about doing these kind of things. I'm trying to merge it. It's really hard. everyone's vocabulary or in.

entity varies. some people get it, some people never heard of it and then try writing a book to all the different audiences. it's tough, but at the same time, it's interesting cuz I'm getting critique from people that are very advanced saying, oh, this is so simple. And then I'm getting other people that have never heard of this saying, wow, this was.[00:05:00]

You know, somewhat above my head, but enough where I, I learned so much. And so just finding that right audience for the different, things. And then the other part is this technology changes so fast that as every time I'm about to submit the book for a publishment, I realize, oh wait, this. It just came out today.

And so then I start pausing and like, let me add this. And so then I finally said, okay, I just gotta write a, uh, draw a line in the sand and say, just go for it. And, and if a lot changes, then I'm encouraging people to follow me on LinkedIn and social media so I can kind of educate 'em that way.

Hall T. Martin: Well, as you look at chat g p t, what, surprised you the most about it in applying it to the healthcare space?

Dr. Harvey Castro: Honestly, it's kind of scary and good in a good and bad way. I'm really shocked at what it can do. And, and the problem too is, , the

latest edition chat, PT four, has been released up to a point. But the point of. Adding, , what's called uploading information and doing that for the general public, it's not there yet.

And so big picture, what surprises me is the ability, [00:06:00] and I want to test it, but for example, as an ER doctor, I see a lot of patients unfortunately that overdose. And sometimes when they come in, they come in with a few bottles. Uh, Pills in their bottle and different bottles, but they take the labels off and they don't want anybody knowing.

Well, it's hard to find out. So it takes me a bit of time to figure out what pill they were on, look at the code on the pill, call poison control and then figure it out, the patient. I see a, and no one's talked about this, I think I've the only person that, since I'm an ER doctor that talks about this, I see a feature where pretty in the near future, like I think in a few months where you could take a picture of the pill. The database will recognize what pill it is or pills. It'll go into a poison controlled database and then spit out a result saying, okay, this patient took X, Y, Z. This is the antidote. These are the symptoms to look out for. This is the amount of time you need to watch the patient, and it'll give me that within seconds as opposed to the traditional way Right now that is taking hours.

Hall T. Martin: And after [00:07:00] you did all this research and worked with it for a while, what was the most important takeaway you found?

Dr. Harvey Castro: Uh, the best profound one for me has been, I honestly, this sounds weird, but I use it as a.

Person I can talk to about, just kind of like brainstorming. So any brainstorming session, and I call it a person because I go in and, an idea and I start working with chat. G B t I use the fourth edition because it's more accurate and tends to have less hallucination.

and that's how I use it and I love that feature. Feel like I'm way more productive, able to do more, see things, and I'm using my creativity, combining it with the power of chat G P T, and coming up with something more than I would've done by myself.

Hall T. Martin: Oh, great. Well, your, your book covers a lot of different application areas, like clinical decision supports, clinical trials, remote patient support, telemedicine, and more.

Uh, it seems like it's very expansive. It seems like it could do just about anything. Where do you think it's gonna fit best?

Dr. Harvey Castro: You [00:08:00] know, I think the first edition, uh, or rendition of this, of the issues is this thing called hallucination, meaning that it can tell you a half truth and. False and you don't know. And so right now in healthcare, I feel personally it has to be, with the doctor's blessings, meaning, and it has to be the right doctor.

So I keep saying I'm an ER doctor. If you give me something outside of my field, like surgery. And tell me, Hey, look at this and is this the correct surgery? I may say, yes, medically it sounds good, but then if you show it to a surgeon, they may say no. And so my point is it's not quite ready. And what it's best for, I believe is education and, but with the caveat that the doctor has to give its blessings.

So, example, if you're diabetic hypertension over.

t can give out output, and then that information can be put on your website, can put on your discharge instructions. Those kind of utility I see would be best to help our patients as we move forward and this, technology advances.

I think we'll be able to do all the things that I talk about in that book about [00:09:00] telemedicine and, patient interviews. I, I think that is already coming sooner than later, but I think it'll be refined 10 times better when we get to chat G p t five and six.

Hall T. Martin: One thing about AI systems is that they're very dependent upon the data sets that they get to examine. , where do you see data coming from to train these systems and and how would you control it? So it gets good data, not bad

Dr. Harvey Castro: Yeah, good question. The future is not gonna be chat g p t in healthcare, even though that's what I, my book is called, uh, the Future's gonna be some kind of G P T. I always tell the audience, Think of G P T as Kleenex. It's the first one you played with. And I really think a lot of people in their mind, they'll maybe be playing with Bard or Bio G P T or some other G P T, but they'll still say, oh, I was doing it on chat G P T, just kind of, you'd say Google, I Googled it, but you may have used something else.

It wasn't actually Google. And so my point is, how do I see this in the future? Uh, how to eliminate those biases. Number one, in healthcare, I truly believe

there's something called Bio G P T, possibly may be the one [00:10:00] that. Basically the, the, data that goes into it is a hundred percent just healthcare.

And so it'll be, PubMed up to date, all the different, sources that a doctor tends to use. And then, um, forward as a doctor uses it, it'll be reinforced by other doctors using it. And so now you're increasing the health IQ of the database to the point where I could say, I, this sounds horrible to even say, but I think it'll be higher than a human being because it'll have access to so many.

Different databases that it would be really tough for a human being to be able to absorb all that information. And then as information keeps changing, uh, of this quote, every 72 days, medical knowledge doubles. And so for you to consume all of that is why we become specialists into a certain type of medicine because we can't take it all in.

Hall T. Martin: Do you think startups are going to form around vertical versions of ai? That some call it vertical SaaS? [00:11:00] It's a type of startup model where we don't try to make a tool for everybody. We make it for a specific industry and therefore we can go deeper and, and more, more effective with it. You think that's how it's gonna shape out here?

Dr. Harvey Castro: Oh yeah, for sure. already seen it, uh, funny cuz at first I thought, wow, when Jet G p t four, uh, the APIs come out, it's gonna revolutionize what you said. And then now G P T came out with the plugins and I thought, man, that was genius. Okay, so fast forward between the APIs and the plugins.

I think we're gonna see so many things coming into this space that doctors and administrators are not gonna know which one to go with.

Hall T. Martin: well, we, we see a lot of medical device deals come through and, increasingly we're seeing them with AI systems behind them, usually around very specific things that need to be determined.

But do you think we'll see in the future, a chat G p T version for every medical device coming out for, you know, coordination, maintenance, support, diagnostics, et cetera?

Dr. Harvey Castro: Yeah, [00:12:00] the problem with, P T in general, I see it, it's like you're having a shotgun and you may not need that shotgun for your, device, and so it makes more sense to train, uh, G P T. That is particular to that

subset of the market and create that vertical. Using that particular device, you could create a G P T that's only for the device.

That way for HIPAA reasons, privacy, uh, hallucination, you have way more control. So moving forward, I do see that as the future.

Hall T. Martin: So based on this experience, what are you going to write next?

Dr. Harvey Castro: Uh, actually this is gonna sound crazy. Uh, really, uh, like not, it probably made me a little bit a D h D and you're gonna laugh. Uh, recently, uh, was the medical correspondent for Nancy Grace. I did a couple of, uh, podcasts for her. And I'm gonna surprise her. Um, I'm hoping to publish by next week first crime book, will have g p t and crime and going over different cases using G P T [00:13:00] four.

And I'm gonna, my goal is to have it done, ready, and, and, doesn't know this, but then next week sometime, it to her and, and see what she thinks. be kind of cool just to get her her angle

Hall T. Martin: Well, great. Well, I always ask this question of everybody. It's a great way to discover new things out there. What online information source did you find most helpful in writing this?

Dr. Harvey Castro: Yeah. Um,

to healthcare, honestly, the best one

This sounds odd. Just everyone, everyone on LinkedIn, all the leaders open ai, different sources, so it wasn't just one. able to see what different groups understand and see, and like what you mentioned earlier, there's a lot of programmers giving their thoughts, but then there's a lot of businessmen giving their thoughts.

And then being a doctor and being able to put it all together as I'm also a business person, uh, it all together, all those sources, and then bring it into one and creating a, a new idea. Technically what entrepreneur is, and that's literally what I'm doing with the book. So I, I think you'll enjoy my, my next book.

[00:14:00] It's gonna be called, uh, Bing co-pilot and, and it's got a longer than that. But, but you're, you're gonna like that book cuz I go into a lot of ideas of that. No one's really thought of how to use this in medicine and I'm sure

computer engineers and people are gonna get the books saying, Ooh, this is a good idea.

I can create this product.

Hall T. Martin: Well, great. Well, if you could start a business tomorrow based on all the technologies and applications you see, what would you start that business in?

Dr. Harvey Castro: Yeah, I think it depends. For me personally, it would be focus on healthcare, creating a, different vertical for patients and, and specializing. me, I personally think the top 10, uh, diseases would be a good focus and focusing even more would be in the top three. And those are usually diabetes, hypertension.

create a product in those verticals, you're gonna do well, and especially if you're combining this technology.

Hall T. Martin: well. Great.

Well, recently there was a, announcement that many people were calling for the, pause of development on chat, G p T four, by many notable people as well who are in the [00:15:00] space. what was your take on.

Dr. Harvey Castro: You know, that's a, I have mixed emotions on that because unfortunately a lot of people will make an opinion and, and, take a pause. Is there a second intention there? For example, Elon Musk is one of the people that have said, Hey, we need to pause this, but yet he was the one that. Uh, started, uh, mil, millions of dollars into open ai and he, known that he's creating his own chat, G p t equivalent.

And so, you know, my devil advocate in me makes me think, well, if he's asking for six months, does that mean he's needs six months to catch up?

Or, you know, is he using this influence as a purist? Say, no, we, we do need to push legislation. And it's not really that he's asking for a pause, but it's his way to get the politicians involved to jump in.

And, do agree that we do need to make sure that we're regulated to, to degree, but not the point that we suffer from the advancement of this technology. with that said, I do worry that if, uh, all I need is $600 to have a G P T. Then I'm

[00:16:00] worried that if the wrong hands, uh, their own G P T, then sky's the limit in a bad way.

And so they may use that technology for, I don't wanna sound like a comic book, but for evil and do the wrong thing. And so when he wrote that letter, that's why I said I have mixed feelings. I, I do think it's res, responsibility of a large corporation. And not to get too philosophical, but it's almost like having a, a nuclear bomb.

able to build that kind of technology, then you, it comes with respons. And I would make sure that if anyone that's doing it, I'd hope and pray that they're doing it with the right intent and they put the right blocks and things, for example, you would hate for someone to be able to build this and all of a sudden know how to sort of invent the government, how to make their own bombs, how to create, massive, uh, casualties.

And they're using this tool in that manner. As opposed to open AI currently is doing everything they can to block those kind of things. And [00:17:00] so, you know that I'm gonna pose that back to everybody. You know, it's, of goes both ways. What h how can we best regulate this but at the same time advance this technology?

Hall T. Martin: Well, it certainly seemed like it came up fast. I think they announced it back in November, and even here four or five months later, it is really just taking off very quickly. Everybody's adopting it and it is the next thing. Did you, uh, think it would be that big of a thing when it first came out?

Dr. Harvey Castro: I did, I did. When I got to see and play with it myself, I, immediately realized, and I don't think it's by accident, that here, uh, three months in, we're already hearing about the next rendition. I personally think these individuals were sitting in the boardroom, looked at the technology and said, Hey, we can't come out with this version five or even six or whatever.

Say they're up to five. We can't release this today because if we do. We're gonna disrupt the economy so bad that it, this is gonna, it's gonna end up hurting. And I, I honestly think they put the brakes on it and that's why they let three out, uh, [00:18:00] and then they let four before pseudo out because they know that this can disrupt.

And I, the sad part is a lot of the world, I say a lot, if you look at the percentage of the world that knows about it, it's very, very small. Yet this thing is advancing so,

And so I think by the time the world, this technology, who knows where we'll be. And I think those that wanted to cause a pause or wanted to make change, it may be too late.

I feel like the cat's out of the bag. And this is why I wrote the book initially. I, I don't want, horrible to say, but I don't want businessmen controlling healthcare. I want doctors and patients to control healthcare. And so I've wrote chat, pt, healthcare. Not for the business person, not for the person running Microsoft, but to run it by a doctor and a patient.

Because I think those two people will have the best in mind and will create the best tool and will not look at it from a monetization point of view, but look at [00:19:00] more as how can it help? I think the money will come, but if you put the money first and then the patient second to me, that's the wrong order.

Hall T. Martin: Well, I, I applaud your effort there to, you know, put the, the patient and the physician back in charge of healthcare. That would be a great thing. And, uh, uh, support you in all of that In the last few minutes that we have here, what else should we cover that we haven't,

Dr. Harvey Castro: You know, uh, talked about it, but, um, it behind me, the social mo movement in healthcare to make change it. I, I would to have people follow my LinkedIn group. It's called Chu PT and Healthcare. Uh, I no ownership other than having people in there in the sense that they're lawyers and doctors and patients, but I feel like together we.

Really create change. And then I'm hoping that there is a programmer out there that's, uh, in that forum that says, you know what, we're gonna create this tool. And I know there's million dollar companies out there that are gonna be upset, but this is gonna help patients. And, and with that because at the end of the day, it's a competitive market and it's just gonna help drive prices down.

And [00:20:00] hopefully that'll come down to the consumer and the patients can get better care

Hall T. Martin: Well great. And so where can people go to buy your book?

Dr. Harvey Castro: Yeah, my book is on Amazon and all you gotta do is type in Harvey Castro, MD and you'll see all the books that I've written. And the nice thing about doing it that way is if I promote one book or the other, by the time you see this, I may have another book out. So you may like that one more.

Hall T. Martin: Well, that's great. And so how best for listeners to get back in touch with you.

Dr. Harvey Castro: Yeah, I, I hate to say it this way, but I live on LinkedIn, so feel free to, uh, follow LinkedIn and, um, I'm about responding and I'm pretty good about, uh, keeping my pulse to the media and, and posting anything that I see right away and, and kind of share with people.

Hall T. Martin: Well, great. We'll put that in the show notes. I want to thank you for joining us today, and we hope to have you back for a follow up soon.

Dr. Harvey Castro: Thank you so much. And I hope to be back .