The Construction User 2.0 - Episode 24: Embracing AI - A conversation with Junaid Ahmed

Kirk: Today is something special. We're going to be talking to Junaid Ahmed. He has a career spanning over a decade in video production and tech solutions. Junaid epitomizes in depth knowledge and hands-on experience. His computer science and engineering background has infused him with the analytical mindset required to break down complex challenges into actionable solutions, a skill he generously shares with his [inaudible 00:00:56] community.

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Junaid has revolutionized how entrepreneurs, influencers, and creatives think about their workspaces, their work, their product and innovations around it. Please join me in welcoming Junaid Ahmed.

Junaid, thank you so much for coming on and talking to us today a little bit about AI.

Junaid: Absolutely, Kirk. It's a passion of mine. In fact, I've published at least three books using AI to help me format it. In fact, I've used it for several projects of mine. There's a health organization. I can't remember the name of it, but I've used it in user UX design area. I've used it for creative. I used it to teach high school students entrepreneurship. I've used it in anything that you can imagine, because I think of AI as an expert on demand. Just like you can come to me and like, hey, Junaid, help me build a studio. What do I need to do? I'm an expert on demand access. AI is similar to that, but in many, many different realms.

Kirk: I like that. Before we dive deep, I always try to keep these as fun, light, and conversational. My first question is always this. What is the last song to get stuck in your head? What is the last song that you just had that's stuck there?

Junaid: That's a really good question. I think Closing Time is probably the last song.

Kirk: By Semisonic from 1999?

Junaid: Yeah.

Kirk: Okay, nice.

Junaid: The reason for that is because me and my neighbor have a playlist, and we jam together on this music. That's one of the songs that we sing together.

Kirk: It's a good song. The second you said it, it will be stuck in my head now because that's my era. That was high school.

Junaid: That's right.

Kirk: Okay. There are a lot of people. Until moderately recently, I was very much one of them, there are a lot of people that think AI is scary. You open up ChatGPT and you're like, what do I do now? Or how am I supposed to use it? Now our email ad says, do you want to rewrite this with AI? Walk me through what it is and why we are not supposed to be.. Demystify it a little bit.

Junaid: All right. The funny thing is we've been using AI without knowing for the past 20 years. Anytime we search Google for something, it's using some kind of AI to go find the information on the entire web. Google built an algorithm that finds the most closest thing that's going to match based on your search term and keywords. Those might be big words, but basically anytime you ask it, it's going to give you a result of data.

Over the years, before OpenAI even came out, Google has some really amazing engineers. They're like, hey, what if we could create a large language model that can give you an answer, because we've accumulated so much data from the internet, it'll just give you an answer?

These eight engineers went to work. They created this OpenAI, and it basically sat on the shelf for a few years because Google is a huge company. They're like, you know what, screw this, we're going to launch it on our own. They left the company, and they started OpenAI as an open source AI collaborative. They launched OpenAI in 2015.

That's a little bit of history of what OpenAI is. The reason it's so much more accessible now is because now, ChatGPT 3.0 came out in November of 2022. It was now more conversational. It was smarter. Have you ever tried talking to a one-year-old or a two-year-old? They know what you're saying, but they can't really respond back. But a three-year-old can answer your questions pretty confidently. OpenAI is getting smarter over time. Now we're looking at ChatGPT 4.0.

Kirk: Yeah, we're on 4 now.

Junaid: Just recently I was checking, and they now have an enterprise version where you can collaborate with your peeps inside ChatGPT. I'm like, wow, this is next level. The ability for you to create your own ChatGPT engine is even more amazing.

Because now what's happening is, for example, what this means is for any specific industry, we have specific language, we have specific lingo that we use. For example, if you talk to computer

engineers, they have a specific lingo that they communicate with each other. If you talk to restaurants. servers, or chefs, they have a specific language that they speak with. They have the same thing. In the construction space, you have a specific language that you use.

Kirk: Actually, to that exact end a few years ago, we have this thing every year called Startup Battle. Our listeners know that. I don't believe that you do, but we have this thing called Startup Battle, and one of our first winners of Startup Battle was a company called Document Crunch. It was started by a bunch of lawyers using a large language model to scan through CBAs and PLAs, project labor agreements and collective bargaining agreements, to find red flags, similar language like, hey, this contract doesn't compare as well to this contract.

We've been working with Document Crunch for a few years now. They're rolling out exactly like you just said. It scrapes all these CBAs, PLAs, and tries to compare the language, so exactly what you just said.

Junaid: That's really powerful. That's really good to know, because that capability has been there from the beginning. Not the beginning, but since ChatGPT 4.0 came out, they had the transactional or analytical models built in.

Now, there are 180 million people using it on a daily basis. Because it's getting more and more smarter, they are able to now integrate more features and then make it available for every single person. Being able to build a platform, in fact, Jarvis and some other platforms have been using OpenAI since the early days. Grammarly has been using OpenAI since 2018.

Kirk: I don't want to go way off the rails here, but this question might, so I might have to reel us back after asking a question that's going to send us off anyway, and that's this. You hear people talking about like, oh, OpenAI, they're getting sued by the New York Times, which is true. They're getting sued by all these people, and they're going to sue them into oblivion. AI is going to die. Tell me why that's not going to happen.

Junaid: The reason why that will not happen is because that is just a way for a company in the past who want to try to keep the status quo. We've seen how that has horribly gone wrong in the past years. The status quo will never change because change is constant, and it's going to continue to evolve. Yes, they're suing them, which means that there are going to be changes.

When you get a red light, you get a ticket. Does that mean that you're going to stop driving altogether? No, you're going to adjust, and you're going to continue moving forward. I think that's what we're seeing in the industry as well.

Kirk: But OpenAI being open source, even if the company that is OpenAI went away, the code, the concept, the process, it's out there now. We can shut down a company. To look at this as negatively as possible, once a cockroach is in your house, they spread too quickly if you had that view of AI. But it's here now. It's not about getting rid of it, it's about dealing with it.

Junaid: It's about conforming it to be a more morally upright citizen of the human race, essentially.

Kirk: Okay. Let's talk a little bit about application. Not me personally, I'm just saying, theoretically, I'm an executive C suite level. With the exception of Google, which we've already brought up, which is where OpenAI came from, with the exception of that, I've been writing my own emails for years, I've been googling for myself for years. How do I integrate AI without completely changing everything I'm working on on a personal level? We'll get to organizational in a second, but how do I start to use OpenAI right now for myself to see what this is?

Junaid: That's an excellent question. Because you've been writing a ton of emails, you've been writing a ton of blog posts, you've got an amazing book out as well, what's happening is when you think about ourselves as human beings, we're taught to, hey, go read this book, this book, to understand certain concepts, let's say time management concepts, financial model. You're learning from others. You're learning from other experts. They learn from other experts, and those experts learn from other experts altogether.

What ChatGPT or these large language models enable is to then learn from you. You can say, hey, here's all my personal emails that I've written. This is the style that I write in. Can you use this style and talk about this new topic or this already topic that I talk about? Now it's using your style to then write new content, new replies, and emails.

Kirk: That makes sense for me. I get it. But literally, day one, I wake up on Monday morning. I'm a 55-year-old CEO executive, I google OpenAI or ChatGPT, what is step one for using this, because that's the barrier to entry? I think lots of people understand what large language models are, I think lots of people don't, and we can get into that. But what is the first step? What's the entry point for someone learning about AI?

Junaid: The first step is to create an account on OpenAI. Think of the past. Okay, when's the first time you hired a secretary? How easy was it for you to give up control of all the things that you controlled?

Kirk: Fair point.

Junaid: It's a learning curve. You have to just ask simple questions of OpenAI. For somebody starting fresh and new, they've actually given us sample prompts. For example, to look now, they're like, hey, come up with concepts for a retro style arcade game. That's a little thing that they'll say, there are four different prompts or suggestions for you to then ask OpenAI, hey, can you do this kind of thing?

In the beginning, it was a lot harder to understand what is going on, but now they're hinting at what is possible. Just the other day, just for fun, somebody mentioned about why socks are

always disappearing in your dryer. Maybe they're having a party somewhere. I was like, I think that was a joke by Mitch Hedberg.

I look him up, and I couldn't find it. But I remember, and I read some of his jokes and I love his jokes. God bless his soul. I was like, go to ChatGPT. I said, hey, ChatGPT, can you write some jokes related to animals based on Mitch Hedberg's joke style. He gave me like four or five different options. I was just cracking up reading them because, again, what it's doing is it's learning from all the content that's out there based on Mitch Hedberg. It's then learning from that style, and that's what we do.

Back in the days, when you look at Shakespeare, he has a specific style of writing, sounds like old English or whatnot. People spoke in that way, because that was the norm. But now we talk in a very different style of speaking, and that's what it's able to mimic essentially.

Kirk: I have two follow ups, and they might take you out of your purview. If you don't know, of course, go ahead. There are two concerns that arise from what you said. First is garbage in, garbage out. There's a lot of garbage on the internet.

If I walk into a rally of a particular side, I'm not going to try to get partisan here, and ask them what's the biggest problem in America, if it's a blue group, I'm going to get one thing, if it's a red group, I'm going to get a different thing. If I ask the internet what the answer is, it's going to Frankenstein me an answer out of some very smart and very stupid people. How do we rectify that?

Junaid: That's where the humans come in. We need to continue to train the model. We need to continue to say, hey, this is wrong, this is right. Can you try again? Again, teach it, because ChatGPT, you can imagine it as a person growing up with access to all of this information.

Kirk: If I ask two real grown up adults, they disagree. We'll get adults telling them both sides are correct, both sides are wrong. Are we asking ChatGPT to form opinions for us?

Junaid: I don't know. That's a really good question. Being a parent of four kids, I'm trying to make sure that they're morally straight. They're respecting others and whatnot. It's hard work. It's not easy. They're going to form their own opinions. They're going to do what they want to do. Say, hey, please take the trash out. It's going to take a few things, but they've already made up their mind if they want to do or not. Again, the question is, how malleable is ChatGPT and what kind of boundaries and what kind of safeguards have the developers put into place for something like this?

Kirk: Okay, second question, if all it's doing is scraping data, one of the use cases that I've heard of and I've used in things is, I give it a bunch of things like, hey, summarize this for me or break this down. A use case that I've heard about in other things is you record your entire board

meeting, you upload all of the transcription, and then you ask ChatGPT to make meeting notes of the transcription. It's really fast. It's an incredible efficiency.

If you think that through, that requires me to upload sensitive, non disclosable committee meeting and board meeting data. Talk to me about the security of that. Is that safe?

Junaid: Based on what I read recently, they are saying that their enterprise version, they said, we're going to give you access to an enclosed or a sandbox model. They're saying that there are safeguards in place that's going to make sure that the security of the data that you're providing is going to stay within your sandbox of your environment or your enterprise application.

Kirk: Breaking free a little bit of the personal user, we have the emails. ChatGPT, at least to my knowledge, wasn't around when I wrote my book. It was a long process. I'm happy to hear that you had some assistance with yours. Mine was an arduous, arduous task.

We have all this helps writes this, helps write that, and I can see the application there. Let's start talking more enterprise level for your business. What are applications that a large company can start using AI to do?

Junaid: Some of the things is you can use it for code checking. Especially if you're a web developer, you've written a ton of code, and there's something breaking, you can actually take that code and say, hey, can you analyze this code and see why it's breaking? These are the kinds of errors that I'm getting. Because it has access to other applications, for example, there's a place where all web developers hang out to talk code, it's able to help you improve that code and meet specific standards.

For example, hey, make sure that this is W3C standard, it meets the ADA compliant. Make sure this code is ADA compliant and whatnot. It's able to do that because it has an understanding. You can use it to be a tech advisor. Basically what we're doing is we only have so much capacity to remember how far back we want to go. Our brains are constantly growing.

Just to give you an example of the power of our brain, they did a CT scan of brains of two taxi drivers from London, one who had been driving for one year and one that had been driving for ten years. The part of the brain that deals with navigation was much enlarged than the guy who had been doing it for ten years.

Kirk: Just because it was a repeatable muscle.

Junaid: It's not repeatable. What's happening is every single day, we have 1700 new neurons born in our brains. Depending on what we're learning and what we're doing, that's the area that the cells are going to be consumed in.

Kirk: That makes sense.

Junaid: The reason I'm talking about the brain is because the LLM is essentially a brain that's continually learning, and it stores that information.

Kirk: LLM is Large Language Model, for those who didn't pick that up. I just wanted to connect the dots.

Junaid: Yeah, thank you. We as human beings, as English speaking human beings, we use the English language model for our comprehension, vocabulary, and whatnot. That's why I say it's large language model, meaning that language is replaceable with C++ JavaScript, financial, you name it. It's able to store all of that data and access it really quickly.

Kirk: Tying that back, from a company, obviously you mentioned web developers using codes, and we mentioned Document Crunch earlier that's doing a variation of this with PLAs and CBAs. Also, there are companies that I'm hearing using this for reading of blueprints. You mentioned ADA compliance, making sure that the blueprints match codes. I understand you said we need to train it, we need to keep raising it up. But what can't it do? Why are humans safe from AI? What can't it do?

Junaid: At the end of the day, we still need to use our brains to make sure that the information that I'm getting is accurate. For example, I will not use OpenAI to do illegal stuff. Why? Because I'm not an illegal person, right? I am going to use it in the space that I am an expert in.

If I give it code on web development, CSS, I can read that code and decipher if that makes sense, if it's correct or not. I'm not going to use it in space that I'm not an expert in. That's where things are falling off, because people are thinking, oh, I can use it to do all of these things, but they're not an expert in any of those things. That's where it's breaking and falling apart.

Kirk: Just like we'd said with the political or what's going on, there might be differing opinions. We'll always need to go in and spot check things. My last question. We've jumped around a little bit, but we have the personal level, the emails, and things. We have the big model from the things we've discussed, but what's the road map to growth?

You start with using it for your email and maybe your schedule. You start with you. How does someone who's uncomfortable with this even plot out a road map to integrating it on any kind of scale?

Junaid: The first thing that you want to do is get comfortable with the technology that it is. The reason Microsoft, Google, Otter, Apple, Apple's not talking about that they're using it, but they are using machine learning and these types of models inside their applications, Photoshop, literally all of these companies have jumped on board. Why? Because it is the evolution of what they've already been doing. It's an evolution of technology.

Again, number one, you got to get comfortable with using it or having a conversation with it, essentially. Think of it as a person, and that's why it's called ChatGPT. You're having a chat with this person.

I remember almost 15 years ago, when AOL Instant Messenger had some kind of bots, I was like, ooh, this is so fun, let me have a conversation with this bot. It's really fun. Again, you got to be comfortable having those chats with GPT, because we chat on our phones. We're talking on text messaging and Facebook Messenger all the time, and it's the same. You're sending a response back, and then I'm writing something and asking questions. It's the same thing.

You want to get comfortable with that. Once you do get comfortable, then you start seeing how it has access to millions of lines of information and vocabulary. Again, the first step is to get comfortable with it, find somebody who is an expert in it that can solve or find an opportunity to solve a problem.

Again, think of it like this. You've got a bike, you learned how to ride it, but that's about it. But when you have a mission, oh, I got to do 60 miles, then you're like, okay, how do I ride 60 miles?

Kirk: So get comfortable and start pushing the boundaries.

Junaid: Exactly, push the boundaries. You work at it. Again, it's a really cool toy to play with. Unless you know what problem you're trying to solve, it's just going to stay as a toy. When you start seeing what problems it can solve and see what other people are doing, then it starts making more and more sense.

Let me give you an example of how I use it on a project. The project was for Human Health Services. They're like, hey, we need to build a dashboard so we can present it to the IT or the CIO of the HHS and show them, hey, this is what's possible inside here. The only information that I had was hhs.gov, and these are the different departments that I need to work with.

I was like, okay, let's start a chat with ChatGPT. I asked ChatGPT, do you know what HHS is? Yes, this is the Human Health Services organization for the government, and these are all the things. It knows what it is.

I said, okay, what are the different branches that work underneath it? It knows those. I'm like, okay, cool. I'm matching the data that is coming back with the data that's available on their website. I'm like, okay, I'm looking to build a dashboard that's going to show information about the different departments. What would a CIO at HHS be interested in looking at? You might want to look at the personnel. You might want to look at these different things. I'm like, okay, cool. Can you give me the data points that they would be interested in? And it's coming back with the data points.

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What I'm doing is I'm massaging the information, and I'm getting it to give me information that is going to make sense on the other side. I'm able to now take this data, plug it into Excel, create some diagrams. I even asked it, hey, what kind of charts should I be putting on this dashboard? It's like, oh, try a bar chart for this one, try a line chart for this one, try a radar chart for this kind of data.

Now I'm able to take all those data, plug into Excel. You have to know how to use Excel to be able to draw these charts, so then I've drawn these charts, and then I'm taking it to the next level in my UX UI application. I'm plugging it all together and putting the entire page together. That's how we use ChatGPT to build a UX UI application.

If I were to go on from a perspective where I didn't have access to this information, I'll be using three different people, because we're doing research. We're doing data mining, we're doing a graphic person. Again, it's able to give me data based on my expertise, my knowledge, and what I wanted from it.

Kirk: Yeah, just in time, resourcefulness, a lot more self-sustaining. That makes a lot of sense. Junaid, I really appreciate your time today. We try to make these short, just the length of your commute.

I think AI is coming whether we like it or not. I think that we can do whatever we want, but I think that it's here. Large language models are here. Thank you so much. Any conclusionary musings from you?

Junaid: Kirk, thank you so much. This was a fun conversation I love to have. I'm a tech junkie through and through, so learning about and getting to talk about these things is absolutely a lot of fun.

My latest book, the reason I mentioned it is there's not a lot of text, but there's a lot of pictures and stuff, and I was able to use Dall-E to create this and then again put a whole mix of my own expertise into creating this culmination of the book that I was mentioning earlier. Again, it's not just text. It's a lot more deeper than that.

Kirk: Absolutely. What's the title of the book?

Junaid: It's called A to Zoo: An Alphabet Animal Symphony. It's a children's book.

Kirk: Amazing. Awesome, Junaid. Always a pleasure. Hopefully we get to work with you again in the future.

Junaid: Thank you, Kirk.

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