Welcome to the OpenAI podcast, the podcast that opens up the world of AI in a quick and concise manner.
Tune in daily to hear the latest news and breakthroughs in the rapidly evolving world of artificial intelligence.
If you've been following the podcast for a while, you'll know that over the last six months I've been working on a stealth AI startup.
Of the hundreds of projects I've covered, this is the one that I believe has the greatest potential, so today I'm excited to announce AIBOX.
AIBOX is a no-code AI app building platform paired with the App Store for AI that lets you monetize your AI tools.
The platform lets you build apps by linking together AI models like chatGPT, mid-journey, and 11Labs.
Eventually, we'll integrate with software like Gmail, Trello, and Salesforce so you can use AI to automate every function in your organization.
To get notified when we launch and be one of the first to build on the platform, you can join the wait list at AIBOX.AI, the link is in the show notes.
We are currently raising a seed round of funding.
If you're an investor that is focused on disruptive tech, I'd love to tell you more about the platform.
You can reach out to me at jaden at AIBOX.AI, I'll leave that email in the show notes.
Welcome to the AI Chat podcast, I'm your host, Jaden Schaefer.
Today, on the podcast, we are thrilled to be joined by Amir Goel, who is a co-founder and CEO of Biddo, which is a groundbreaking technology company that leverages AI to accelerate software development and enhance developer productivity.
Prior to Biddo, he actually founded Pubmatic, which is a digital advertising platform that went public in 2020.
It's traded on the NASDAQ.
Amir brings a wealth of experience from roles at Microsoft, McKinsey, Netscape, and what I believe really makes him a leading voice in the intersection of AI and software development.
Welcome to the show, Amir.
Thanks so much for having me, excited to be here.
Super excited to have you on the show today.
I wanted to take it off and ask you a little bit about yourself and your background.
In technology, you've worked in this space for a while now.
Is this something you always knew you were interested in, specifically AI and stuff, or is this something that as your career developed, you got pushed in this direction?
What's your background?
Yeah, I think I've been interested in software for a long, long time.
I really love building products and building companies for a long time.
I started a company when I was in college, and I used to do random things as a kid.
But I would say AI is newer for me in the sense of I, former company, Pubmatic, I started, I used to run machine learning team there, something that I would say classically I'm more of a product type persona.

Technology companies is something that I love to do, for sure.
So would you be able to tell me a little bit about what inspired you to start Bitto and kind of this new phase of what you're working on?
Yeah, I mean, I think we started actually, we ended up doing a little bit of a pivot.
We started with a focus on developers when started the company, me and my two co-founders.
And really, our focus was how do we help developers collaborate better?
And so we really wanted to be in the tools that developers use on a regular daily basis.
But really, how do we help them, like as a collaborate, kind of bring a Google Docs and Slack type experience to their IDE.
And when everyone was like, oh, this is super cool, I'd love to use it.
And then nobody choose it.
So then we started, but we started listening to that feedback and we started trying to think about what are the different ways that we could help them.
And they said, hey, could you help us understand code, onboard new engineers?
And then that's really how we started spending more time with large language models and AI and really ended up launching kind of the current Bitto in December of 2022, which is today is really an AI assistant that helps developers.
So it's really a tool that developers can use.
It kind of works in their IDE or their CLI.
And they can use it to write test cases, write code, explain code.
Actually, the number one thing people use to do is explain code, debug.
You can just throw debugging errors right into it.
So it's a little bit like it started out as kind of like a chat GPT in your IDE.
Really where we're going is that we're building all these capabilities that really help them do things in a more automated fashion.
So we have agents that will automatically document your entire set of files or repository of code.
You can write test cases, so all kinds of things like that.
And we have about 100,000 developers who are using it today.
Very cool.
Wow, that's incredible.
And I think, you know, big kudos to you for a lot of people, I feel like starting a company do not have the, perhaps the vision when something isn't going exactly how the original hypothesis is to be able to make that pivot and get take on that feedback.
So big kudos to you for taking that and obviously, you know, seeing the reward of that 100,000 developers is incredible.
What is, I'm wondering if you have kind of like a case example or, you know, of someone that has used this and been really successful or kind of the ideal person and maybe a success case using this.
Yeah.
So I can give you kind of two.
So we have like a very large transportation company that said, hey, we

have all these, you know, apps that they're running, but they're not well documented.
No one's really clear exactly how they work.
Could we use BIDO to kind of automatically document?
Because we want to migrate them, they're older apps and we want to migrate them to more of a moderate kind of architecture.
Well, first we need to really understand what they're doing.
And so they're using BIDO to just like automatically, you know, document those apps and they have like close to 50 of them.
And so I think that's, you know, pretty, pretty cool that they're able to like do something that would have taken like thousands, you know, 100 hours and they're, you know, able to do it, you know, in 10 minutes.
And then it changed, you made the automatic and can update, right?
So I think that's kind of like one, you know, interesting kind of use case.
I'll give you two more quick ones.
One is some engineers at Pomadec were actually using it to like, they were saying, hey, how can I use it for testing?
And so one of the things that they did was that they actually asked BIDO to take some code and then said, give me ways to break this code.
And then they turned those ways that it suggested to break the code and they turned that into test cases.
So now they added that to the test suite.
So for example, they were like, oh, like it was accepting some input.
The code is accepting an input.
So they're like, the things that, oh, well, it doesn't really do much handling to take malformed inputs, you know, like, you know, maybe somebody could upload a script that runs, you know, correctly.
So then they use that to then turn those into test cases.
And any time somebody continues up to that code, they run these test cases to make sure that the code's more harder, you know, very cool though.
Yeah.
So I thought that was kind of interesting.
And then the third one would be really quick is my nine year old.
He, he's like learning the program, but to be honest, he's, it's funny to watch him.
He's like an AI program.
So like, you sort of really understand how the code works, but AI helps him kind of advance and be a little bold, like super charged.
So he basically said, hey, write me a Chrome extension.
Him and his brother were trying to trade Pokemon cards.
So he said, I want to give you a name of a product.
I want you to write a Chrome extension that like automatically searches eBay for those products and brings me back an ordered list by price.
And it wrote the whole Chrome extension in like one minute for him.

And then he just followed the instructions and set it up.
So, you know, those are kind of, you know, three interesting use cases.
Super cool.
That's, that's super cool.
One thing I would love to ask you and get your feedback on is, you know, from your perspective and some of the things you've seen, right, you launched this thing back in December, what are the ways you see AI really shifting?
Like even from the beginning of the year till now, right?
You've made pivots in your company, but what are the ways you're seeing the landscape of AI shift?
What are some things you're, you're seeing on the future?
Yeah, I think it's a really good question because I think sort of the laws of gravity are occurring, you know, when it comes to like all the AI innovation that's happening.
And what I mean by that, I don't know if you remember, but so far back as November, December last year, when you went to when ChatGPD launched, right?
I mean, you're in the AI space too, obviously.
Like it was crazy about like every day, some announcement would come out.
Like the whole world was changing.
There'd be somebody would say, I just raked up this amazing thing over the weekend and they would launch it on Twitter, X or whatever.
It was kind of like, just seemed like everything was changing like overnight.
And people were talking about like going to lose their job in 15 minutes.
And like, oh, the software is dead.
And like, we don't need software developers anymore, right?
Because no loser job.
But we know all these things were out there, right?
And I was like, it was really cool to like, you could do things really quickly and you could rig up this little like 30 second demo of like, hey, I took one hour and I kind of thing.
And I think now we're, you know, here we are fast forward, let's say like nine months, if you look at Twitter, you know, you look at like just, there's a lot of AI announced what's still happening.
So I'm not trying to say to not maybe instead of having three unbelievable things happening every day, it's kind of like one, one amazing thing is happening a week, you know, and maybe it'll be like, well, you know, one is happening a month.
You know, because I think the bar kind of going up and, you know, and we're also in this phase now where to actually turn like that little quick demo that you wrote into like a real product that people can use that actually works repeatedly.
Well, it gives you kind of the similar output, you know, that is turning into a lot more work.
Um, and I think what's happening is that people are realizing that like, it's

like everything's going to change, but maybe not in like 15 minutes.
It's going to probably take some, you know, years of change.
And then maybe one last thing I'll mention about this, I think users, consumers, business people, engineers, whatever, like changing behavior doesn't happen overnight, you know, so people are, um, they are kind of used to doing things a certain way and adopting new ways of doing things isn't always like easiest thing.
And so we, we even noticed that in our product, you know, people will be like, Oh, this is really cool.
It can do all these things.
And then, you know, maybe we'll look at some users who stopped a lot from using it and they'll be like, Oh, I just kind of forgot about it.
Or I kind of just ended up going back to the way I was doing it.
Or if you look at like chat, GBT, you know, there's been all these articles kind of saying that, you know, you used to jobs, you went up like crazy.
And then it's kind of flattened and even coming down a little bit, you know, the last few, um, and there's some different arguments about kids are in school and they're just not needing to cheat as much.
But you know, the point is that like, you talked to a lot of people today who were like, Oh yeah, I have a chat, you need scripture.
I don't really use it though.
You know, so I think human behavior and even just understanding how to use these new tools takes time as well.
Isn't, yeah, 100% agree.
I had taken my projects you're working on.
Definitely.
Yeah, I think, uh, I mean, of course there's like the novelty of everyone wanting to try chat, GBT to just see what it can do.
Um, but then it kind of comes down to like who's, you know, actively using it in the workflow.
Like I know for one, I would be, I'd be doomed if I did not have chat, GBT to help me prep for podcasts and like so much stuff I do.
I've, it's kind of interesting because, uh, essentially what I've done is I've pretty much scaled up my outputs, my business outputs to like maybe like five X what I was doing before.
And it's like, if I did not have chat, GBT, if this would be unsustainable, I would be, I'd be completely doomed.
So it's kind of funny that I feel like that's like a big pivot, but like again, you know, some people, if they don't have it figured out into the workflow, they'll just continue using it.
But if you find it for something and it's like, you can use it for something that's repeatable in your, in your workflow, like you're never going to give it up because it's too, too valuable.

One thing I would, I'd love to kind of ask you about, um, if I end up from you as, you know, as far as like Bitbos kind of AI code assistant goes, I'm wondering like, how does this differ from, you know, competitors?
Of course there's like, you have co-pilot and there's these other, there's these other ones, how does this kind of, um, differ in terms of like understanding the context of, you know, a developer's project and that kind of stuff.
Yeah, no, it's a great, great question.
You know, I think, um, one of the things that we really are, you know, focused on is like, how do we really understand, you know, the developer and their, their context?
Like you were kind of mentioning it.
So for example, like we index your entire code base and allow you to answer questions or work on your existing code, you know, um, you know, co-pilot today is really just like, as you type a line of code, you can complete it, but you can't really help getting interactive, you know, chat.
I mean, they're working on some of that stuff for sure.
And I know, I know, but like, you know, we're really trying to think about how do we help that developer really understand their code base and use AI on that.
And we want to help you really understand kind of all that stuff going on in your organization and help you use, you know, AI on that.
Um, and I think that's one of the reasons we're seeing like so much adoption is that like it's a versatile tool.
You can use it to do code completions.
You can use it to do chat and you can do it, you know, use it in a lot of different ways in a very flexible set of ways.
Mm-hmm.
Okay.
Very cool.
Um, something I would, I'd be curious to hear your opinion on as well as like, you know, obviously this is a, this is a big field.
Um, what are some of the main challenges that, you know, you guys are facing right now in, in rolling these tools out and rolling, you know, Bitto out to people.
Um, it's, you know, it's, it's a very ambitious vision, I feel like, for a company.
Um, so, you know, what are some of the big challenges that you are, that you're up against and some of the things you're doing to, to overcome them?
Yeah.
Well, one of the, I mean, maybe don't mention two things.
One is around, um, uh, kind of like ease of use.
And then the second is maybe around, um, cost of AI models.
So the first one, ease of use.
So, you know, we've taken a PLG product led growth approach, right?
Which is that we want it to be super easy to get going and started with our product.
You know, you can literally sign up and start using it within like two minutes.

And, you know, often running, we wanted you to get to that aha moment, you know, very, very quickly.
Now, cool.
So, you know, one of the things is the, for example, like when we try to index your whole code base, you know, there are some other tools out there that let you do that, but you have to set up a separate app and it, you know, can literally take like an order and like, okay, now publish an endpoint and set up this server. I mean, it turns into like a whole project, you know, it's down.
We actually write on your machine, like deploy a vector database and build kind of all these, you know, index of vector index of all of your code and locally on your machine for security reasons so that it's not like in the cloud.
But, you know, we try to make it so that the user doesn't have to change anything. Literally, they just had to say, except like, I want to do this.
Cool.
Um, and so let's take a lot of energy and work to kind of make that happen in a very seamless, easy to use way.
I think that if you had like three hours of work that you had to do to enable that, I think that that wouldn't be, you know, um, a lot of users wouldn't be interested in trying it out.
You know, so yeah, today we only really offer that for our paid users, but we're trying to think about how to offer that, you know, for all of our, you know, for all of our kind of free use.
Well, and so that's something that, you know, goes back to the kind of your question about like, Hey, these are some of the types of challenges like an appeal demodel trying to make it super easy to use the product and, you know, not all this configuration installation kind of all that stuff.
Second thing, maybe I'll mention, you were asking, uh, the second thing I was going to mention was around kind of AI model cost is so, you know, these AI models are not cheap.
Um, well, I didn't know that it's at a whole different level, uh, um, cost than normal compute, you know, there's so many services where people are like, Oh yeah, it's free to use because they're like, Oh, you're just using a little bit of like, you know, AWS compute time or, you know, yeah, compute time costs us a couple cents a user a month or a fee for that.
Well, that's not really the case in these AI tools.
If you're, if you're really aggressively using that, you know, like you can easily spend several dollars a month on a, for a user, you know, if they're really querying in a lot and running a lot of GPG for queries or, you know, anthropic has a great model called to that we use, you know, like those things can really add up in cost.
And so, you know, people will be like, well, I want access to this thing, but I don't want to pay.
And so, you know, we of course want to give them a really robust product.

But we're all, I don't know, like, how do we do that?
You know, in a way that is cost effective.
He is at price that they're willing to pay, but be also then, you know, hopefully over time, we want to have some margin, you know, to build some revenue for our company. And you do have, there's a long term thing, which is like, you know, that there's a bit of a Moore's law happening on these AI models.
And over time, the cost is going down as, you know, compute gets cheaper.
But in Iran, you know, that's not always exactly the case.
Right. OK. Very cool.
One thing that I would I'd love to ask you about is what are some of the things that you get you guys are currently working on that you're really excited for in the future, like some maybe like future features or the kind of future direction you guys plan on going.
This is a really interesting space.
And like you mentioned, like there is a lot of competition.
There is a lot of people kind of looking at it, big players and whatnot.
I'm like really impressed that you guys are like doing this as a startup and you're getting in there and like you've just done so much.
I'm blown away. And I think maybe one of your competitive advantages is having that kind of more agile, scrappier team versus something like a GitHub co-pilot.
You can get a lot of these like innovative things done very fast.
But, you know, just curious, like what are some of the things you guys are looking forward to in the future and excited about there?
Yeah, no, it's a great question.
I mean, we're definitely trying to move really fast.
And I do think that's kind of one of our superpowers, if you will, is to be agile and try to move quickly.
And, you know, there's just a few of us that kind of work to make some of these decisions we don't have like a whole thing by committee or, you know, whatever, like a bigger company.
So, yeah, I mean, I think a couple of really interesting things.
So we actually have like a code completions product launching in October, which we're pretty excited about.
So this will be a little bit of like, you know, as you type, we'll complete a line of code or you can put a comment in your code and we'll write the whole block of code.
And I think one of the things that we're really bringing to that, which is different than everybody else out there, is like, we really do understand your code base.
And so you can use that to actually really write much better code, right?
We understand the functions, the methods, you know, the variable names that you're using.
And so we can really use that to really write much more code that I think really

is much more relevant.
And so we think that, you know, we can help developers maybe, you know, write as much as like half of their code.
So I think that's kind of something that we're, you know, pretty, pretty excited about.
And then I think, you know, the other thing I'll mention is that we're really doing a lot of work on our agents.
So we have some initial agents, you know, that we put out there, like one for, I think I mentioned briefly before, but like for, you know, test animations or the right test cases, not one for documentation.
But, you know, those are still, you know, they're early.
They're kind of, you know, alpha kind of versions, but we're doing a lot to like really improve those and make those more and more robust.
And so every week we're trying to really improve those and add more, you know, things around that we have some other things we're doing around code review agents that we're hoping to launch, you know, later this year.
So I mean, really excited about all these things.
I mean, today our average user tells us that.
Biddo makes them 31% more productive.
Which if you kind of think about that, like, I didn't think it was going to be that hot actually.
I think we're just like surveying our users, right?
We're like, Hey, you used Biddo, like how much more productive does it make you?
And we're a bunch of, I mean, 31 is the average, right?
So of course there are a bunch of people that said, Oh, no, it makes me like 5% more productive.
We give up Archie users who said, Oh, it makes, I think that there was like more than 25% of people said it makes them over like 100% more productive.
Oh, wow.
Yeah.
And I'd kind of feel like we're just getting started, you know, so when I think, maybe from where we are by the end of the year, or maybe from sitting here in, you know, September 2023, where we are a year from now, I'm actually hoping that we can say, yeah, we make people like 100%, 150% more productive, which if you think about that, like we're focused on professional developers and helping them in their jobs, like we think about it in the work context, like, you know, a developer, you know, companies spend, let's say $150,000 a year on developer, like a, if you could be 100% more productive, it's like, wow, it's a huge return on ROI, but I think, yeah, maybe more interesting is that like for the developer themselves, we think that we can remove a lot of the kind of drudgery of work that's been out there.
I mean, there's been this whole kind of push the last like 70 years called shift left in the development world.

Oh, we should include security earlier in the process.
Then you write more secure code.
We should make test earlier in the process.
So then you have more, you know, you better tested code, more code coverage.
And all that's kind of ended up on the developer's plate.
And so the developer is like, I'm supposed to become an expert in everything like CICD, I'm supposed to become an expert in, you know, security, static code analysis, open source vulnerabilities.
I'm supposed to become an, you know, expert in test coverage, test framework, unit test.
So all of these things are like, they are making better code.
We are having more secure, you know, better performing code.
But at the same point, the developer is like, I'm not getting that much time to actually just work on the stuff I want to work on, which is like thinking about how to design a good solution and then, and then executing.
And so we think that a lot of these AI tools can eliminate a lot of that work that frankly, a lot of developers don't consider like that core to what they're doing and clear of a lot of that documentation, you know, like all that stuff just be handled for them.
And so developers can kind of get back to almost like having fun and doing the work they want to do.
Very cool.
Yeah.
I think that's, uh, I think that's incredible.
You guys are doing some really cool stuff.
So definitely this is a company that I'm going to be following along on the journey and watching what you guys are doing.
Um, for people that want to, uh, you know, find out more about you guys and, you know, maybe give Bitto a try.
What's the best way for people to find Bitto?
Yeah.
I mean, just check on our website, Bitto, B, I, T, O dot AI, Bitto dot AI.
And, um, yeah, right from there, you can, like I said, sign up in, you know, one minute and get going.
We have a, we have plugins for the visual studio code ID, we have plugins for all the JetBrains IDEs, like PyCharm, Golang, um, Ruby, you know, all the different languages that JetBrains supports, Android Studio, et cetera.
We also have a CLI so you can run it right from your command line interface.
And we have a Chrome extension and a web app as well.
So we kind of cover kind of all your bases.
Very cool.
Okay.
Awesome.

And I'll make sure for the listeners, I'll have a link in the show notes.
Um, to Bitto, you guys can go check it out.
Um, Umar, thank you so much for coming on the show today.
Thank you so much for sharing your story, the insights and some of the cool stuff you guys are working on.
I'll definitely have to have you on another time.
Um, to the listeners, thank you so much for tuning into the AI chat podcast.
Make sure to rate us wherever you get your podcasts and have an amazing rest of your day.
If you are looking for an innovative and creative community of people using chat GPT, you need to join our chat GPT creators community.
I'll drop a link in the description to this podcast.
We'd love to see you there where we share tips and tricks of what is working in chat GPT.
It's a lot easier than a podcast as you can see screenshots.
You can share and comment on things that are currently working.
So if this sounds interesting to you, check out the link in the comment.
We'd love to have you in the community.
Thanks for joining me on the open AI podcast.
It would mean the world to me if you would rate this podcast wherever you listen to your podcasts and I'll see you tomorrow.