

(cleaned) Participant 21 and TE Study

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SPEAKERS

Livia, Mark Date

Livia 1:42

And we can start with your background story. Can you share a little bit about how you got to your field of work right now?

participant 21 2:54

Yeah, so I guess I left school went into electrical engineering. So I guess that's my background, though. I didn't kind of I didn't stick at that. So I was destined to go into that because my my my uncles, were involved in it on a [bank course] and the they've made a great life out of it. And it was kind of a an apprenticeship. So it was kind of, I guess, three days or college, two days in a factory. The factory was making it sounds quite glamorous, like control panels or nuclear power stations. I ended up spending most of my days my head stuck in a panel. Nobody liked this one wiring these things up. And I quickly got bored of that, and I left and I broke my parents heart, but it was just just wasn't the right thing for me. And I guess I spent since then I spent most of my adult life kind of creating small businesses, everything from kinda like retail. All the way through to construction. We've got a construction business at the moment at this point in time. And I guess, in I think it was kind of it's 2016 I kind of discovered Bitcoin. And I got it kind of us compared to other people around me. I got I kind of got it instantly. And I think the reason for that was I also had like a side business back in the early 2000s, where I was buying and selling domain names, like the.net.com. I think it's difficult to kind of, I think the markets died down but back then there was an there was a marketplace for actual digital assets. There will there was digital assets before kind of the kind of token based digital assets we've got now. So I guess that's why I kind of soon as I saw Bitcoin, I kind of fell in love with it and and saw it for what it was. I saw that Satoshi had you know flew like decentralized consensus had solved the kind of double spend copy and paste kind of problem that had gone on with other digital assets before that. And I guess it it kind of changed the course of my life because three Bitcoin, I discovered ethereum and, and I was around in 2017. I don't know if you remember but there's a huge the ERC 20 standard was born. And that created this huge Ico boom where people were, like the Cambrian explosion of different blockchains and different tokens and it was just kind of wild to be to see that be caught up in that. I didn't get too involved in that. I just kind of watched it. I'm not really a financial guy, and I guess more creative than anything. But I was around for the birth of the NFT boom. So the ERC 721 token standard. I kind of Yeah, I was around for that. And that was my kind of that's my passion that kind of hit that. That's an

area of wanting to get involved with. Also with my brother I collect kind of urban art and decided at that time we would kind of create work with street artists, onboard them into new thing web three NFTs, and spent I think it was in 2019 spent a few years doing that. The company's startup was \$name\$. And yeah, we worked with quite a few street artists introduce them to new revenue streams via NFTs. I think it was just co locked down to just come in as well. So we introduced many of them to this kind of a viable new revenue stream when they can go into streets and use their streets to the canvas and it can create kind of physical art so sorry, I just turned my phone off

I'm sorry about that. Yeah, yeah. So that was that was 2019 I think to 2021 2021 I discovered a kind of a friend a \$name\$. And I guess I've been there since going through the going through the kind of course there but also hosting study groups. I hosted the fundamental study group and I hosted the kind of machinations study group as well. And that's me up to now and obviously, with the with the survey as well.

Livia 7:51

Awesome. Thank you. Yeah, it's nice to learn about your story. And how would you define token engineering?

participant 21 8:01

Well, it's new to me I need kind of learn of token engineering, since joining the academy. So the Academy would define it as the design verification and optimization of token based economic systems. I would add to that. So I would make a slight change. I would define it as the design of verification and optimization of robust token based economic systems. Because I think what what that's where the engineering in token engineering colors this it's the kind of the kind of historic professional ethics of token engineering that really defines this sector.

Livia 8:40

What would you say makes the system robust?

participant 21 8:55

I think it's the application of engineering ethics. So you know, and this is kind of something to think about quite a lot. And what is the engineer? Is it a credential? Is it just a mindset where you apply these engineering principles? But I guess it's the you know, the engineer actively applies science to his work, you know, so that's the stem science. You know, the, the math the computer science, and also applies the, should apply the social sciences into their work as well. So I guess the difference between a token engineer and designer is is that kind of application of the environment application of science actually into into the design process.

Livia 9:54

Awesome, and we just say there's a step by step to the token engineering practice.

participant 21 10:01

Yeah, so we've gone through that in the academy. I would say, you know, if we're looking at first principles, if we're saying where do we start? I would say and I guess, me being non technical with biases in some way, but I would always start with the if we're a bit if we're designing a system for humans, which we still are at this point in time, but even when AI even when we've got AI assistants we will be driven by human needs, impulses, desires. So if it's a sort of that human element that is the kind of a first, that's the kind of first place to start for me and it's kind of it starts with the why and it's it's why why why taken and if it's if it's a war on money, or I want a build something that 1000 x's or you know, if it's purely financial based, then I would say, a token engineer, wouldn't necessarily get involved in that or should get involved in that. Because as part of the engineering as part of the robustness of engineering we're looking for sustainable systems and you know, pump and dumps aren't sustainable. So I guess again, that's so yeah, it goes back. Like first principles is the why going back to the human element, why do you want a token? Why you know, what, what are the what are the kind of what are the right ways, not the right ways to have a token, but why should you have a token? Well, I guess it's to your turning commitment, you can turn community members into stakeholders, you know, you can really you can really empower and reward communities for for them and get them a stake in the in the things that they help build. And the token will also help you to kind of organize and coordinate scaling as well. So I think that there is there is a valid need, but I guess where would I start? I would kind of tease that out of the person to make sure that that need is valid and it's not just the next meme, meme coin that they want to 1000x.

Livia 12:45

Can you share about your daily work routine? And I guess I'm curious more about when you are hosting this, study groups at a tea Academy, all your work that you think is involved with token engineering? What are examples of some tests, rituals, processes that you handle?

participant 21 13:07

Yeah, so I guess part of this study groups: discord, featured, really heavy in that is obviously the \$name\$ said, kind of discord based group. We stored information recorded, you know, we used to record sessions. So we stored that information on Google Docs. In notion. I think I'll be we had a YouTube channel as well. We also we also had a machinations study group as well. So obviously machinations featured in that, which is kind of a visual simulator for like it was first developed for bandits in games, but it's often for is now being used to kind of map value flows around systems and a lot of kind of token engineers are using it, and it's visual as well. So it's very good. So kind of a pace to cadCAD or post two, a Excel sheet. It's very good for communicating to the stakeholders, actually what's going on in the system, and any kind of value flows around that. So we machinations kind of featured heavily in that I think there was I think maybe Twitter was involved as well. Which is

awesome or somewhere in crypto would take an engineer I think. I think that was it. I mean, yeah, I think that's pretty much it for the for the study groups.

Livia 14:43

And do you have examples of the have you worked in a token engineering project yet?

participant 21 14:50

So I was

I was involved in the \$name\$ application that you know that that created NFTS history [RS] and I've also been a been become exposed to other tools that token engineers I've used in the in the in the study groups can jump to share those with you the ones that I know that they're using, or was it just kind of me personally?

Livia 15:19

Um,

yeah, I think I'm curious on the range of, of projects you have seen and been involved with, like if they're opposite qualities of them or whatever like some extent of your practice within token engineering in terms of projects.

participant 21 15:41

Yeah. So I see there are kind of almost two extents. I think that my feeling that so the projects I've been involved in have been at the application level. So they were built, built on Ethereum and they leverage the kind of ERC 20 kind of solid the NFT ERC 71 standard. So applications built on top of protocol. So I guess that's right at the right at the kind of less complex end of of, that's more kind of token design. And for that are used, so the application is built for me but in conjunction with that I use meta mask I used ether scan I used to kind of a treasure hardware wallet. I see that's kind of one end. So if you ask him for contrast, I see the higher end of this are actually the actual protocols that designed the actual blockchains layer when it's themselves you know, like, like Bitcoin like Ethereum that is where I think token engineering actually comes into play. I don't think you need token engineering as I you know, to deploy a smart contract to create some NFTs to sell but I do I do feel you need, I do think that people who actively create blockchains layer ones, or by definition, token engineers so I guess that's the that's that's the two extremes. that I see in the kind of design space will take an engineering being like kind of crendon icon at the top, the most complex and creating something at the application level being more tokenomics designer, kind of that dial that area really.

Livia 17:46

Just to clarify, you mean token engineers working more at a system level and token designers more at an application level?

participant 21 17:55

I think so. Yeah. Yeah. So token engineer will will kind of deep you know, will apply to science game theory, computer science, mathematics, in actually designing these systems, these layer one blockchains, whereas myself right at the other end, you know, we'll create an application on top of these layer ones, to create something at the application level that that the leverage leverage in the work that the token engineers have done at the protocol level. So I show there's there's a very, very distinct gap between the two.

You just mentioned a few now, but do you have other areas of knowledge that you think are essential for token engineering practice?

Yeah, so

So is that crypto economic flower, isn't it and I, I truly believe that that all elements feed into that. And again, I'm biased because I'm more leaning towards the social sciences, some non technical at this stage. But definitely the social sciences you know, psychology and, and from anthropology. Kind of game theory even in that touches on that as well. I feel all these feed into it, because I guess, as I said before, for me, the kind of it starts it starts with understanding the kind of the, the human element of these systems and then perhaps feeding that into the into the into the kind of the science, the sciences, such as math and and then into the computer science. So I do feel and I feel you know, I've mentioned it before but there's a saying isn't like to for the for the person with a hammer everything looks like a nail so I'm I see in in you know, the the token engineers and I call them token engineers a highly qualified people in this space are building systems and the critical level. I feel they're viewing it through their discipline. So that you know, there are kind of, I know there are token engineers who are kind of electrical. Yeah, who have electrical engineering and mechanical engineering background. I've seen diagrams and they viewed as systems of almost almost like electrons moving around this kind of circuit you know that the humans are electrons and and they've built the built robust systems at work. But yeah, it is kind of brought home like we all view we can all view these systems for you few different lenses and you know their sound, you have the computer science people who just see see as you know, a see the system as code or kind of the human element as code like interacting with each other. And all right algorithms and also the math people who see, see, like the human elements formula, almost, you know. So, I think it's important for those to really come into the socials and really kind of dive in dive in there.

Livia 21:23

I'm curious to why you consider yourself a non technical person when you have an engineering background at your coding background and also you are hosting the study groups for machinations, which is quite a technical tool. So you have like why Yeah, why

don't you see yourself as a technical person and well would be in your opinion, a technical person?

participant 21 21:48

Yeah, I guess I don't see myself as technical because I haven't got like a deep math background. And I don't I don't code I think I think there's a core. You know, what, whilst I think the socials are important. I do think that, you know, for the typical engineering discipline, I do think that like, you know, computer science and, you know, a math background or the you know, by the key stage to that. And because I don't have those, I don't, I didn't consider it. I wouldn't consider myself a token engineer. And it's funny as well, isn't it? I mean, what is a token engineer is it's a mindset, philosophy, philosophy, is a credential is it a degree, you know, is it going through the token engineering academy? It's, it's something that I really haven't kind of grasped and I'm not sure if or at what stage I would consider myself a token engineer. I do have like electrical engineering background, but that's the first first two years didn't qualify. So I think instead of myself like electrical engineering, I do have enough knowledge to be dangerous, I guess. So.

Livia 22:56

What challenges have you faced in your work with token engineering? Personally?

participant 21 23:02

Yeah, so I guess I'm so when I was working again, it's more the human element. So when I would like create the application, and when I was kind of approaching, like the street artists. I had this application and I had this you know, there's a clear revenue stream for them. I find that that it's it that for adoption. So I guess its challenges are adoption. So and and I find people you know, unless there is a clear, clear need or some value that can be delivered almost kind of instantly to them. Sorry, I just just closed the door. So I guess challenges adoption from my work with like with with people on the street. They didn't necessarily share my my kind of fervor over like new tech, it really needs to be a least I have some clear value to them and easy to realize as well. And I asked for like your token engineering, I think the challenges are that kind of. So that's my kind of my experience at application. Level for a check what I've seen it taken engineering is there's kind of there's there's lack of a clear taxonomy. And as I said, each, the electrical engineer will approach it from one angle, and math guy will approach it from another, someone from social sciences would perhaps approach it from more like anthropology or some from Game Theory. We're all kind of these different angles. Which which I don't think it's a prominent self, but I think it'd be a lot more efficient if there's a clear taxonomy, a clear structure, maybe even like a clear credential most I'm not the biggest fan of credentials in the world. I'm happy that the powers that you know that the university is slowly being eroded and, and, you know, learning is being made more, more open, but I think some kind of clear credential that says you've done this degree or this course. You're now taken engineer. Would I think that would kind of help adoption with, I guess, the term or the kind of the field if you like.

Livia 26:04

You don't feel like that's the case in the \$name\$ with the?

participant 21 26:09

Oh, it's a Yeah, yeah. Yeah. No, absolutely. Yeah. No, I think that I guess that's why I'm there. But I guess from listening to the interviews, there's still I guess, there's still this kind of, I guess, on the reluctance to really grab hold of that term. And I think that what is he kind of mean he's doing that. I think it will get there but I think right now, that like you know, those are the challenges that I see. Yeah, like a clear, clear definition. I know that the \$academy\$ is doing that. And I think they're heading in the right in the right direction. It's just I guess, I'd like to see it, really, people run with it and it really grow into like this mainstream thing.

Livia 27:08

Pitfalls in the practice of te, do you see happening?

participant 21 27:11

I think it goes back to I guess it was about what we're talking about earlier, kind of like the you know, the human element, why the token. So from my I don't think people really understand the cost of launching a token. I don't think I think people really understand you know, how to integrate tokens into a community. So I guess so. So from my experience, I mean, there are two different types of taken, you know, from I tend to class and there's two there to kind of you ERC 20 either mod currency kind of tokens and there there are kind of NFT star tokens. So, as someone who wants to create a token just the act of creation, creating a token does not interfere with value, real value is you know, to give it value have to it has to be exchangeable for something stable coin or for it to have financial value. It has to have be exchangeable for something so weird is that you can exchange it for ETH or BTC on \$name\$ or on an exchange, well, if you're kind of it, if you want, you know, dis on \$name\$ if you want if you want to set up a pool there, then you have to have I think like minimum 100,000 I don't know a million pounds with liquidity in that pool. Okay, you don't have to you don't have to create that itself. You can create you can create kind of liquidity liquidity mining programs, but that has a cost in itself to the stake and obviously, it's inflationary. If you want to list on an exchange where then you know, a couple of days into the list and then you have to incentivize market making. But so I don't think people really understand that that there is a real financial cost to launching a token. And once you've done that, there is a real cost to having this this financial token right in the heart of your community. So I've seen it at apps, absolutely devastate communities where you know, that there is no there's no cultural element to a financial taken and introducing that into your community. You're just introducing, all it does is price go out and price come down. And then I guess you know, if it is liquid, then you can you know, the speculators come in. Absolutely turn the community upside down, pump and dump. The left bag holders you're left with bad bad feeling, you're left with a wreck community. So I mean, in the

conversations that I had, and if people are building, you know, building applications or even protocols, I guess for them to work, they have to have a community around them. And then in that respect if they're not DeFi based, I feel it should be like an NFT token. Because I feel it's more it lends itself more to be in kind of like a total a more, a more cultural artifact that's more kind of in keeping with the kind of the vibe and kind of ethics of that of that community. They're not liquid so you don't get this massive price increases are they that you can you know, you do see that when you list on open sea, etc. But for the most part, they can just sit there and they can just be be a an asset stake in that community, that kind of that that community member owns. That is a lot more inner than having this currency at the heart of you're at the heart of your community.

Livia 31:15

I think you mentioned in a lot of the description of the challenges and the pitfalls you have mentioned some things you would like to see that I needed for token engineering, but is there something you want to compliment on what are the most pressing needs for the future address?

participant 21 31:32

Yeah, so I think kind of a definite shared taxonomy and yeah up seeking the kind of \$TEAS\$ training and accreditation and for the future, the field. I'd like to see, I think it's happening. Regulation has been a massive hurdle. And from from just my experience, people have just been, you know, the people who could come in and make some really big contributions can really build, you know, some real value, great systems are just holding back, just for the lack of clarity really. So I think some kind of unified or not unified, but I guess someone's waiting for the US. Aren't they? You know, so like for the US to get its act together with its kind of sorry with its you know, whether it's going to whether it's going to kind of embrace blockchains and like token based systems or not. I guess that's what I'd like to see. Some kind of for the economists to really embrace this and kind of open up the markets.

Livia 32:56

Yeah, we've been hearing a big need for regulations. It's been resonant in a lot of the interviews.

participant 21 33:04

It's coming so Europe just launched mica the China just opened up are going to allow Hong Kong to license web applications. Nothing is happening. I'm not sure about US. Yeah. It just seems they really don't want it which is a shame to them because obviously, this is like borderless, it people will just will up and leave and they can base themselves in friendlier kinda jurisdictions, really. But yeah.

Livia 33:44

Go ahead. Sorry.

participant 21 33:45

Oh, yeah, no, I'm just saying yeah, that, for me, that's the that's, that's the biggest thing really just kind of just having some, you know, the larger markets to open up and really embrace this.

Livia 33:57

And moving over to ethics, which you have mentioned a lot already. So I'm curious to hear what do you think is the role of ethics and token engineering.

participant 21 34:07

I gave this some thought of for me. For me, they're kind of just talking about token engineering that there are two kind of two areas of ethics really. There's there's the professional professional ethics of an engineer to build sustainable robust systems [with the environment]. And for that it's almost you didn't you didn't have ethics or the modern kind of ethics or the kind of the kind of popular or politicized ethics that we see now like climate and like social justice, etc. I think, I think, for a token engineer to have to build a robust system he can't allow any ethics any of the modern ethics into the system whatsoever. So I know Satoshi did this and I know Vitalik actively did this with etherium. And he called it to keep the base layer credibly neutral of any ethics, any of any ethical [team] and that's because the the more modern ethics, they tend to change with the wind, they can change with governments. I guess the more popular ethics you know, we've seen I guess the, you know, this this new spike, the social justice kind of movement. That's recent. That's only been you know, that started really in I think, 2013 2014 the real kind of push for it in a Bitcoin has been going since 2010. And, you know, these base layers cannot incorporate these these split size ethics because they check the change so often, that they're unrealistic in what you know, once you create a system, especially Bitcoin, you can't go in or you shouldn't go in and tweak it to the to the latest thing really it should be, it should stay neutral as possible. And I think like as, as \$Vitalik\$ said, it's it's what's ethical, this year, may not be ethical, or you know, the latest ethics that next year or the next kind of political change in political office. And you will end up having these kind of wars between stakeholders where, you know, almost two camps where, you know, you can also have like the Conservatives versus the wakes baked into your kind of blockchain almost if you're, if you if you're almost snap it to one kind of modern ethical position. So I think so to answer your question, I think the take an engineer as has a should profession should be professionally ethical, that if they are creating a base layer, they should keep it as credibly neutral as possible. That there is you know, and it's kind of with, if you look at Bitcoin, kind of its objective function is to kind of increase security. That's its main function. So you can say increasing security is ethical, professional, ethical, because it protects the blockchain and therefore, people's assets. on there, and the stage for etherium as well. So like, I guess, not saying that there should there for me there isn't a place for Ethics in web three or two. But I think that's more at the application level. applications built on top of the layer one where people can then then

create these, you know, these social justice applications, these applications that kind of serve minority these applications that kind of, you know, help, help, you know, help fund climate change applications, but I think I can see them as this is two things.

Livia 34:10

Yeah, thank you. That's you brought a lot of [accurate].

Do you have thoughts on how to increase diversity and inclusivity within the field?

participant 21 38:43

I don't, you know, but I think it's for a couple of reasons. I think for one that is kind of, I see that upstream. I mean, if so, if we if we need diversity, then I think this is a technical area then I think that comes from how do we bring my nose into this I think that other than being open and DM on Discord and things you know Sorry. It's it's it's, it's it's more extreme. It's kind of at the university level or at school level, or the parent or the parent level, you know. I don't see other than being welcoming how maybe we can but I didn't see an obvious way we can improve that. I guess for the record. This is the kind of most diverse space I've been in anyway, you know. Okay, I'm like middle aged white male, from Europe. So I've got a particular slant, but I've ever been in a space that I've met so many people from such diverse backgrounds and racist ideologies. All in one space. I certainly I certainly didn't split in some gone on in web two. Even though I wasn't that involved, but I guess on Facebook, my my kind of my, my friends lists were 20 people in 10 miles of where I live, you know, here, somewhere around the world. So yeah, I don't have a big, big take on diversity because I find this like probably the most diverse place I've ever been.

Livia 40:41

moving over to incentives, what are the incentives should be a practicing token engineer.

participant 21 40:51

Yeah, um so financial settings aside, I mean, we're at the, this is a frontier and it's it's, I guess it really suits people who are kind of happy. Being in that space, but if you're the kind of person who likes adventure, you like sometimes every day, being different. Who kind of can come in and stick a stick and claim on some territory that's potentially going to be massive and have kind of, you know, such wide ranging kind of far reaching implications and positive ones. as well. You know, building a borderless kind of equitable financial system. That incentive there's no for me, there's no other space right now. That's exciting as this I can purely because it has does touch on all these different sciences. And all these technologies tend to feed into it, you know, AI will feed into it as well. That was incentive for me. You know, it's just to the kind of sense of adventure and being at Frontier and and yeah, not knowing what what tomorrow looks like really odd kind of and, and it's not for everyone is it? You know, I know plenty people that you would hate that. But that's insane if it's to

come in. This is kind of new virgin territory. Come and plant your flag and build a name for yourself. Explore and have adventure, you know.

Livia 42:44

How do you think what do you think is the average salary of token engineer?

participant 21 42:53

so I just kind of have not been employed as an engineer, but I can tell you what I've heard. So I think they're a different kind of way. I think. I've heard a lot it's it's probably similar to a software engineer on average, if you've been employed whatever software engineer there isn't, I guess it depends between 50 and 100k. But then I've heard other other ways of incentivizing as well there are kind of payment tokens, which may bring that down, and equity stakes as well, which may, you know, it may be created as a kind of salary but I've I've heard some kind of wild, you know, I know token engineers. He's worked for an agency doing it and I've heard some wild kind of figures. I think he was he was working for agency he charged like 300k for a three or four month project. But these were kind of highly credentialed and they were from the kinda the TRad fi space. So they had these really big thing. It's quite a quite a well known name, who who went into this space and I think they leverage that more than anything. So yeah, I think, you know, between 50 and 150k, and then, you know, that may vary if you take tokens as well or if you take equity and then if you're going to if you're a consultancy, I have no idea but probably from the span that I get in my kind of email inbox when it started from one or 2000 for full application up to I guess, hundreds of 1000s So it varies wildly. Yeah, I I think it varies wildly.

Livia 44:42

Yeah, quite a big range.

participant 21 44:44

Yeah, yeah.

Livia 44:47

Oh, what do you wish for the future of the field? How do you see it in the next three years?

participant 21 44:54

I would like to see it so yeah, I guess that's regulation. I would like some, you know, the, the biggest kind of economies in the world open up be nice to see the US to kind of turn a corner and embrace it, and at least allow one state to kind of grant with some kind of like free license. I think they'll have kind of next rather, the kind of whole for the whole world really.

What I see for the future, what do I wish for the future? So I It is that kind of what do I see as well? Or just what what do I wish?

Livia 45:36

Yeah, what do we what do you wish and if what do you see is different than you wish then maybe you have some worries that you're welcome to share too.

participant 21 45:50

Oh, yeah. What I worry about Yeah, I mean, it's kind of Yeah, I guess regulation at the way I guess my Well, it's it what it's what I wish for and what I think wish for us, I think there's things both it's it's two sides of this forward, which can cut both ways. So I think we're going to move away from where we are right now is very skeuomorphic meaning meaning that it's kind of we're leaving on web 2 to create, you know, we don't know what we don't know what this can do yet. So we lean on web 2 to create applications in this space. So it's kind of like on the blockchain [name] blockchain, you know, we've got web marketplaces on the blockchain, let's have food delivered on the blockchain. So very, looking at history, looking at the past to see what we can create here, but it's not very web free native. I think they're, I think the future will be or hope the future will be not looking at the past. We find some really, really digitally native that that that we create for this. And I think maybe part of that will be that we can start kind of tokenizing we can start tokenizing experiences and places and we can unlock business models that have been laid for public goods that have been difficult to do any under any other method. And I think that's a digital kind of two edged sword because okay, we've got to see we've got these like green spaces, these forests, and we can we can unlock that now. tokenization we can say, with this technology and AI, we can now fire you what it is to take a walk through a forest therefore we can buy these forests and they have value and investors can come in and buy them keep them as green spaces. Which is great. But then I guess a thought comes into my head and it's like, you know, to know the price of everything but the true value of nothing. So now we have these green spaces and now we can we can kind of we're almost financialized in them. So okay to walk through this forest, because to a micro transaction you know, that it's almost it's almost and the argument against that I agree with against like the these kinds of tokens and blockchain is it's almost like the word is financialized enough. But now we're kind of creating this hyper financialization through tech and engineering through blockchains. Which can does have a kind of dystopian and almost black mirror, feel to it. If they're OK. We can now take a nice the air that means we can value it and investors come in and we can clean the air. But then there's gonna be a charge for using that air. And what if people can't afford that? Or can't live in areas that that have clean air? So but as in most things in life, there, you know, you gain something you lose something. So I guess that would be my fear going from a financialized world into a hyper financialized world. But we shall see I'm here and I still believe there'll be a net gain

Livia 49:28

Are there any specific developments or innovations you would like to see

participant 21 49:37

I'd like to see what just like that, the work that kind of \$name\$ is doing and \$namei\$ is doing on public goods, and how how we can, you know, create different models. We can knock new business models with these kinds of new funding mechanisms. I'd like to really see that develop further because I think that's a space where I'd like to be especially, especially kind of living in the UK where I'm watching. It's like a slow motion car crash and I'm watching like the kind of the the institutions kind of slowly fell and get worse and worse and like the healthcare is failing. The kind of public goods are failing here in my opinion. So I would really like to see development in that area so communities can take hold of their own health care their own food, their own roads even you know, I think that's that's where that's what I'd like to see this skilling instead of, you know, sort of the Ponzi games I guess we see now but Ponzi games you know, it's a new technology, all new technology kind of is driven by human face needs, you know, like the internet was driven by adult entertainment and, you know, just kind of, you know, these these kind of almost these lower brainstem needs but it kind of, you know, this financialization and speculation but it got the infrastructure and I believe that's where we are now there's all this financialization we see. As a, you know, it does have a, you know, it's not great on one end, but it does drive the kind of investment infrastructure that we need, then to go on to build these more meaningful kind of projects on top of it.

Livia 51:45

We're approaching the end. We have just the last two question. Two questions in our last few minutes. Yeah. So as AI technology continues to advance, how do you see it impacting token engineering in terms of development implementation? What how do you see your said your role in it?

participant 21 52:09

Yeah, I think I think everyone's pretty much agreed that it's going to kind of have a massive impact. I think at the start though, Blockchain is going to have a real kind of stabilizing effect on AI. It's kind of like, I don't know if you've ever been able to see in a in a small fishing boat and everything's moving. And you're getting this kind of sea sickness because you just literally can't focus on anything. I was out there once and the skipper told me there's one thing to focus on, that's permanent when you're seeing and you can't see land. That's horizon. I focused on it. And everything so leaking back into being and orientated. I guess that's an analogy for what blockchain can do. What are we doing for AI I feel so you know, what, you know, imagine? Imagine the small boat being society out at sea, and being buffeted by these new emergent technologies. AI is one of them but you know, there's nano you know, 3d print, and it's all based kind of coming to board at once. I feel that so you've got to say been buffeted by these new widget technologies and but the society is okay, because it's focusing on the horizon and that arise in his blockchain. That will be a stabilizing influence because as as weak, you know, as kind of these traditional, I guess, news outlets or this like traditional phono stage society that get kind of buffeted by AI. And

Bitcoin will be a stabilizing force because it's, in its essence is a truth machine. So, as we're kind of inundated with deep fakes and literally videos, we can't believe anymore. We have this blockchain then I'm running through it. And you know, okay, at the moment, it's quite primitive and I can only say that, you know, a went to be at this time, but with the help of Oracle's we can feed in news and feed the MIT Media. We can feed in we can verify political events, we can verify a sports results, temperatures, worldwide temperatures, so I think that will be a stabilizer on AI technology coming in. And what AI will do for kind of blockchain Yeah, I mean, it's all the way through, isn't it? It's from the it's from the design phase. It's, you know, if you can create models to create kind of real time balancing effects on these economies, you know, instant almost as compared to businesses that adjust perhaps, quarterly or governments that that course correct. annually. We can have real time models that kind of, you know, check in the financial system and then creating tokens or burning them or you know, taking them out and also I think AI is one dice as well. You know, it takes it can take some heavy lifting off off of the community where you know, it's very as you know, it's very clunky right now, I you know, kind of an AI model kind of setup on a multisig to certain parameters, and then you know, once decisions are made, you have the AI kind of execute on that instantaneously, so yeah, I think, yeah, all the way through, I think. Awesome.

Livia 55:40

And lastly, whose work do you admire in the token engineering space?

participant 21 55:46

Oh, well, I think it was mentioned this year is I don't know why no one's mentioned \$name\$. I got mentioned him because obviously, like the like the you know, started blockchain so we know it. I mean, if you can get interview with him, that'd be a bit of a scoop, wouldn't it? If you could say, Satoshi and then obviously \$name\$ because I think it kind of kick started the the web of free space. The more more creative site and \$name\$ he, like you know, he really is a crypto artist, but really kind of, like mechanisms. You know, I think he pioneered that I think create the bonding curves or we did a lot of work on bonding curves, and really kind of put some work in some to make his to build mechanisms right around his artwork. \$name\$ as well, I think he did a lot of work on bonding curves. And \$name\$. Yeah. I wouldn't be here if it weren't for her and the work she's done that and just, you know, I think what she's building there is kind of just just immensely valuable. And I think we do need it we do need that credit credential in the in the kind of in the token engineering space.

Livia 57:25

That's great thank you so much it was really a pleasure to hear you and learn about your insights.

participant 21 57:33

Yeah, no, thank you is that it's honored to be here. You know, it's been some great people kind of do an interview. So it's really good.