(cleaned) Participant 22 and TE Study

livia 2:18
So can you share a little bit about your personal journey and how you got involved in your line of work?

Participant 22 3:47
Yeah, absolutely. So my background is in economics. And before that, I was helping a couple of startups to expand to new markets and new product and it's really in the tech space. So I came into web three, because I was really tired of that company before and web3 was available, and I came in very skeptical mind, like, oh, this sounds like a scam with extra steps. And what did you think you're talking about? And more importantly, what is this economics thing you're talking about? Because my backgrounds in economics and I always wanted to do something economics in tech edit together. So the opportunity was that, let's dive deeper into it. And I don't know if you were there, then but back then. Everyone's talking about this. $name$. So it says, All of you target this velocity and this is how many how the quantity of tokens you should have and how you should design your entire model. I was really furious. There was a fellow possibly offended by that. No, this is not how this economic equation works. You can't just take an input into this new model because of this new industry because this is how it works. The first principles are not even aligned with the first place. So I was really annoyed by that. Then I started to dive deeper into understanding how this entire system work and understand why on earth are they even talking about this economic model? This is a thing in monetary economics. Nobody really talks about it at all, to suddenly seeing that just appearing on papers appearing or white papers then just really strange to dive deeper into it and understand, okay, I understand where they're coming from. They don't have bad intentions about it. So if you want to scam people, but they got the first principles wrong, then it got me to think okay, there were first principles in this space because we've got first principles in hard science in physics and you know, even biology in your blood that we have in our body. Oh, in economics, it's a science, but it's not really hard science. So we need to start rebuilding this space. How do we need to start how can we start thinking conceptualizing what fundamentals are? It is where I started to dive into took two years to dive in and build a model, a bit of framework. Just remember, it's really imagine, imagine with Blockchain technology, we get to build a brand new world or a brand new system, a brand new planet, and we're building a brand new planet, the first thing you think about, I want to do I want to have money, or I want to have governance structures, no doubt. The first thing I want to think about is what is physics. What is gravity in this space? What is the power? What is the impact that equally to all economic agents in the space because governance can act differently if you're different governance, role in you know the jurisdiction and money can be very different or currencies can be very different depending on how many you owe, but gravity is gravity, you're fat, you're skinny, you're a doctor cat, you're human, you fall downwards. So what is that? What is that? That fundamentals we're talking about? Because it got me to create this framework. It's three different pillars. It's market mechanism and token design. There's three design pillars to design the entire economic framework that we're talking

about. The market design, understanding what's in the market, who's in the market, the economic agents in the market. mechanisms are the rules of how people in the market behave, how they interact, because again, we're developing gravity. So what is the knowing that we have gravity, gravity is part of our market structure, or what is the number two gravity that's what mechanism design comes in. And token is any of these things is generated any value is captured in this thing called token? Every thinks it this way, and we started from, from designing of this ecosystem, to studying to figure how to engineer them

livia 7:09
amazing yeah, that's fascinating. And how would you I'm curious, did you come up with what are the primitives in this space?

Participant 22 7:21
Yes, so those will be in these pillars, market mechanism, token design, and within these pillars, you have three, three to four subcategories. And then within these categories, there are more and more subcategories, but this provides a basic framework, a basic architecture constraint before we start engineering, and this this is the difference between engineering and economy. Right engineering, economics, economics is what to optimize I need to understand what my parameters are what my constraints are, what my objective is, I need to define these things. Then I figure out okay, given these constraints, I want my this engineering comes in as his next step to figure out how to optimize that and using tokens is the medium. So when it comes to economics, you can have a token, you don't need to have a token. When it comes to engineering, you typically will have a token. The important thing though, is that token might not be tradable. Right? It could be you know where we use chat GBT where you right queries. These queries are defined by the number of letters you edit spaces or or letters. And these letters are translated to tokens. And these tokens become an internal currency within the text itself, to generate the different outputs or generate whatever they need to generate. So engineering is the optimization of that. And economics is one of the constraints. You know how many letters people can put in how many queries you can type every three hours. Things like that.

livia 8:49
Thank you, and you started to get a little bit into it already. But can you expand on how would you define token engineering

Participant 22 8:58
I would say token engineering is how to optimize the objectives that we're looking at using token as a medium. And token is where it's important to it's important to use token as a means to an end and the end is that optimization function that we're looking at.

livia 9:19
I'm curious to your view, too, on the term engineering, do you think it's important that token engineering has engineering in the name

Participant 22 9:31
Can you explain that a bit farther

livia 9:34
because we had, we had a few reflections about how the word engineering and token engineering gave a certain meaning to the field that it compared somehow it included within other fields of engineering. That there is perhaps some type of ethics built in with engineering, or do you think it's a good choice of word to use token engineering?

Participant 22 10:08
So when you talk about ethics of engineering, so I'm thinking you know, what are the engineering like civil engineering so the ethics will be to make sure that the bridge that I built is strong enough to hold X amount of people? Is that where you're coming from? I don't understand where you're coming from. Is it Yeah, yeah. I think engineering is the perfect term to use because how I understand engineering is is precision, right? If I'm building if I'm building a very huge bridge, and like cars will be driving around the San Francisco bridge every single day. Then I need to engineer this tool, this infrastructure to support that weight to support that. Friction that to support all the cars and freaking that goes through everyday. So I think engineering is precision. And token engineering is exactly that. It's how do i precisely optimize using token as a medium to get that output? And it could be through simulation it could be through agent based modeling could be through excel modeling, but I need the precision to get the output otherwise everything is just based on dropping numbers and engineering captures that perfectly. Okay,

livia 11:17
thank you. We just say there is a step by step to the token engineering practice.

Participant 22 11:25
I mean, I really wish I could say yes, but if there's a step by step everyone would be doing that. I think, you know, with engineering, it's very, it's very dependent on what you're trying to solve dependent on what kind of outcomes you're talking about, again, when we talk about building bridges, a bridge built in Singapore versus in Portugal versus in the US. They're very different kind of considerations to take into place. So I don't think there's a step by step but I could be wrong.

livia 11:56
I think that connection is a little bit choppy. I don't know if it's on my end. I think I will turn the video off for a second to see if it gets better. Thank you. Um,

Participant 22 12:15
so just

livia 12:17

just to make sure I got it right. You would say it's hard to say there's a step by step to token engineering.

Participant 22 12:25
Yes, because I think everything's customize to, to the different kinds of environments that they're in.

livia 12:34
And can you share about your daily work routine? So some examples of typical tasks, rituals and practices that you handle daily?

Participant 22 12:45
Yeah, I'm just curious what why is this question relevant? I don't know.

livia 12:50
Because we wanted to understand what token engineering started doing in practical terms. I think there's still I think people still don't feel so much clarity on like, Oh, what is what is the practicing token engineer doing? What are some of the tasks that are involved in the practice of token engineering?

Participant 22 13:17
Okay, it's, I also run a company I've got 70 People in four continents. So I think my day to day activities and routine might not be relevant in this context, but yeah, I don't know. You tell me. Okay.

livia 13:32
Yeah, sure. No, as you prefer. So are there specific tools that you use to practice token engineering or in your design? Work?

Participant 22 13:47
Yeah, so we do a lot of $Excel$. And I think when it comes to a lot of things creativity, right, it's like asking a company that built the bridge. They need the paper and pencil and rullers so and you know, the software to design. And that will be the usual stuff that we do a lot of brainstorming a lot of whiteboarding, a lot of ideating. And then $Excel$ models are really good. I know that a lot of people use other tools like $cadcad$, other agent based modeling and $machinations$ as well. Huh.

livia 14:26
Could you give two examples of polar opposite token engineering projects that you have been involved with?

Participant 22 14:34
A lot of things I'm involved with are under NDA. So I cannot say that okay. Sure.

livia 14:40
Um, but are there quality, maybe different qualities of we were trying to understand what is the range of projects that would become token engineering clients. Like what is the spectrum of the work of token engineering? A token engineering can do?

Participant 22 15:04
Yeah, that's a good question. I think you know, anything that is under the mainstream web3 space is very relevant. So we do a lot of things in games $Metaverse$ $defi$ infrastructure, $social dao$ a lot of things around there. I think it's easier. Maybe it's easy to say what's not relevant. Actually, when it comes to token engineering, things like those infrastructure might not be relevant. Things like you know your what infrastructure like well, maybe actually Oracle's will also be useful. So that infrastructure will actually be useful, maybe non tokens, then non tokens will not be very useful because you need to engineer the tool, right? And the tool engineering is the token itself. And so that is it strange if you don't have a token, then what are you engineering this space?

livia 15:57
Yeah, that's, that's a great clarification. And which areas of knowledge do you consider essential are the few

Participant 22 16:07
Yeah, I would say the two most important ones are $economics$ and $math$. Again, engineering. The basic of engineering is math. So understanding math helps a lot. And for engineering, it's to understand the what to optimize which is economics. And then the how to optimize part is math.

livia 16:28
Thank you. Now moving through challenges and needs, what challenges have you faced in your work personally with token engineering?

Participant 22 16:38
I would say the thing that keeps me up at night right now, which is a very significant thing is the whole anti token sentiment by the regulators. And so I think the biggest challenge is regulators, it's lawyers. You know, we can build very beautiful models, fantastic models, but the lawyers say that it's not possible because it potentially might one day somehow, in the future, become a security or it might be, it might be a problem with the regulation. And they decide to move away from the States or the country, or those countries are still worried about its legality of selling to the Americans. So that's a that's a very big problem. And going back to what we talked about, again, just now right where engineering it's about. You need to have a token you need to have a token. If you don't have a token, then what what are you engineering? What are you optimizing how token is the medium, the means to optimize? If you don't have that medium, then how are you going to do anything? And if people are getting more and more worried about the existence of tokens, the tokens being available to users, then that's going to be a huge risk.

livia 17:51
Yeah, that's a common reflection we are getting as well, and how people were worried about the legality. Yeah, and what would you say

Participant 22 18:00
I think tokens will still be a part of this, of this community. Otherwise, a lot of things. It's just going to be a lot more challenging without tokens moving forward. Because if you if you're going to decentralize, which is the main ethos right we're going to be centralized, if you want to decentralized then, without these assets in place to represent stakeholder ownership, not a financial ownership but stake holder ownership. That's going to be quite challenging to really decentralize.

livia 18:32
What are the common pitfalls when practicing token engineering?

Participant 22 18:37
I think the first one is not understanding, not defining the problem enough, which is not understanding the constraints and the objectives enough, which means the economic part is not in place. And when I say the economics part in not in place, is with every ecosystem, the reason why we there's no standard or sequence of process for engineering is because each system is so different. It's so unique. So when you don't define what your objective function is, you don't know what parameters you're talking about. Then it becomes very challenging to design the right model. Because these models are complex. These models take time. And when you don't define the objectives enough, if you don't understand the constraints enough, then you're going to waste a lot of time modeling something that's not going to be useful.

Hello,

livia 19:41
hello. I think it's my connection that isn't stable. I'm sorry. I heard most of what you said. Okay. I think I lost the last few seconds

what what do you see as the most pressing needs for the field to address?

Participant 22 20:05
Yeah, that will be the thing keeping me up at night which is regulation, and very specifically just two days ago, the paper that the SEC being super anti crypto, and has a ripple effect, you know, Lechtenstein is a country that's quite open to tokens they have restructured there entire legislation to be more careful when talking about target. So that's, that's worrying. You know, it's not just one jurisdiction in any token, but there is a ripple effect. So regulation, definitely a big thing.

livia 20:46
And now, moving to ethics. What, how do you describe the role of ethics in token engineering?

Participant 22 20:56
I think ethics is really important, because you can design things for good or for bad and we definitely want to design it for good for longevity for long, long term value creation. Not for bad not for short term plans not for not to create illegal things. And you can create, you can engineer something so beautifully, for the wrong purpose for the wrong reason. We've seen a lot of projects doing that. And so this is where ethics come in, because ethics become the only only internal moral compass to our ethical compass to design systems for good. And what is the actionable item there is to think of long term value creation. Instead of short term pump and dump.

livia 21:43
And do you have any concerns of how things are happening now? Um,

Participant 22 21:50
initially, what like 12 months ago when things are a lot of things are wiped out. It was quite, it sucked, because a lot of people lost money, but it was also good to weed out the bad actors for a good amount of time. You know, bad actors had a problem trying to come into the space, which is good, but things are changing again, for some reason. They're more bad actors in the space. Now there are a lot more hack, a lot more exploits. And it's, it's scary. That being said, it's not exactly an engineering problems industry problem. When it comes to engineering, token engineering, especially, you can you can financially engineer a token structure to extract a lot of value. And that is scary because when we're doing token engineering, a lot of things are public, publicly available, people can see that how things are being structured, and people can exploit the system. And that to me is quite scary. Regulation is I mean.

livia 22:46
that's a really good point of this limit until where token engineering goes and then when it becomes a problem of the industry. Could you talk a little bit more about that? What do you think is the boundary of until when token engineering can prevent things like this from happening?

Participant 22 23:06
Going back to our definition of token engineering is really optimizing, optimizing or reach an optimization function, given the constraints we have in place using tokens as a medium. So the limit or the line we draw is where the constraints are different. So if the constraint is x amount of people or are between, you know, 200 to 250 daily active users, and for some reason, there is a scam out there spotting becomes five 500 daily users, then it's not token engineering's fault that is the system's fault. So the the good thing about engineering is that it's so defined, which is why engineering can be so precise. We define the constraints and define the objective, when these parameters change and go beyond the constraints that we have then it's not the engineers fault anymore. It's the product or the technology or the industry.

livia 24:04

Interesting, thank you. And do you have thoughts on how to increase diversity and inclusivity within the field?

Participant 22 24:14
Yeah, so in general, I believe very much in meritocracy. And that's how I lived my entire life. So meritocracy is blind to all these things. So the fact that these things are being brought up, it's just interesting. That being said, I think in my very limited experience, being a female founder, and being a female in this space, helps to make it more comfortable for other females to come in because they, they know that they will not be alone. And that is, that seems to be quite important to a lot of the females that are expected. So all you need is just one. A couple of strong females or like not strong females but like louder females to come in and shows that they create a lot of value and not just the one of those Twitter Lambo girls, you know what I mean? Yes.

livia 25:08
In your perspective, what are the incentives to be a practicing token engineers?

Participant 22 25:17
So, I see from I don't know if that's too much for you, but I see as being a more looking at the world from a more holistic perspective, you know, have an empathy to understand why people behave in such ways and it's because of the incentives full stop. So the incentive to want to practice token engineering is to, to be able to understand the world a bit better, because it was really, really messy. And when you have the ability, the luxury to be designing the right incentives or designing the right strategy and mechanisms to get the output you you're aiming for, you know, the the behaviors that is quite, quite endearing.

livia 25:59
Would you say that token engineering goes beyond the design of economic systems or that economic systems involve a much larger piece of society, and that encompasses this holistic perspective you're bringing?

Participant 22 26:16
I think there are two if it's a Venn diagram, I would say the Venn diagram is finance and economics, the part where they overlap is where engineering comes into play. So you can design up economics, you can design a financial system, and then you end when we talk about engineering. It's given the the constraints in place which is usually the financial and economic constraints, but you can also engineer the financial side effects. So engineering, token engineering, it's not just token economy engineering, but also token financial engineering.

livia 26:51
And talking about finances, what do you think is the average salary of a token engineer?

Participant 22 26:58
I have no idea.

livia 27:01
It was we've been asking this to try to get a range of how are people being paid for services that fall under a token engineering spectrum? And we've been getting quite a wide range in between. Is there any perspective you have? Maybe what you think would be a fair salary?

Participant 22 27:31
I think it depends a lot on the incentives again, right depending on there's so much so many dependencies, whether it's pure money or tokens, because that's one big consideration, how many years of experience whether how complex the things are, whether it's a game Metaverse or infrastructure or it's DeFi, I would say DeFi the easiest of them all and I expect the DeFi to be a lot less pricing wise, compared to the other systems, but I don't have an idea of what the range is. Okay,

livia 28:02
thank you. And what do you wish for the future? The field? How do you see it in the next three years?

Participant 22 28:11
Yeah, I'd say in three ways. One is proper regulation. I have talked a lot about regulation today. Second is education, education of the space education, people, education, primarily, to look beyond token as a financial tool. And this is so education to make sure that everyone knows token is not just financial returns and financial education, this space where people, they're more people in this in this space, more people wanting to take up the engineering, the token engineering, occupation. You can call it that.

livia 28:47
Are there any specific developments or innovations you would like to see?

Participant 22 28:53
um, yeah, I mean, a lot of people are talking about AI, but I don't think AI is there yet at all. I've been diving into a lot of AI stuff. It's it's not there yet. At least not for web3. Or maybe better, better simulation will be will be good. You know where simulation is not about complete coding, but a lot easier. So the barrier to entry to learn about it is much lower. Because right now you require someone to learn to and to have a background in computer science or you can code in Python to be creating the simulation, which weeds out a lot of people in the space and that makes it a lot more challenging for us to be building better projects and innovating on projects.

livia 29:41
Would you say a token engineering is a one person's a job or it requires a team?

Participant 22 29:54
I think again, it depends on how complex things are. But mabye.. Okay, so let's say if you're just doing a specific modeling for something, it could be just one person. Or if you're looking to solve

a one off thing, it's one person but if it's a full project, then I think that will protect there will be a team

livia 30:19
and project describe some of the roles that would be involved in that if it is multiperson it

Participant 22 30:24
It will be like any other project so your project manager you have someone in charge of a modeling someone in charge of like tax paying someone in charge of qualitative aspects

livia 30:54
a data analyst as well.

Participant 22 31:00
Yes, that's a good point. Because with engineering part, you do a lot of modeling and simulation. data analysts part is where you have a lot of data you want to analyze, right? Whereas modeling and data analysis, slightly different. What I like yeah, what do you think about that?

livia 31:21
Yeah, sorry, I didn't mean to suggest that as I thought when you when you meant qualitative, qualitative understanding that Oh, I just wanted to make sure if you were up we're referring to a data analyst.

Participant 22 31:37
Okay, I get what you mean. Yeah, okay. But yes, that can be that can be one thing. The other one was probably you know, writing the paper, like writing the report. Writing the, the outputs of summarizing. Yeah, actually, data analysts will be business analysts or data analysts probably.

livia 31:58
Awesome. Thank you. And you mentioned already that you you don't think AI is there but just as the technology continues to advance, and potentially has to affect token engineering, do you see AI affecting the field in the future, and what do you think your role would be in that in that process? If any?

Participant 22 32:24
Yeah, I think, um, you can come in a couple of ways, whenever it's here. The first one is a lot of these. One of the biggest challenges is that these rules, okay, so you engineer you build the right model you optimize based on the rules and the constraints you have in place. These constraints are public. So once people understand that, people can create bots to bot the system, which becomes a challenge. So I think botting will be one problem. And it's just even more exploits. We talk about financial exploits and this will be even more intense. The second one is that AI will potentially replace a lot of people's jobs, especially the business analysts, I mentioned and the project manager, maybe bigger and I don't know who ever reached the stage where you can just type in, you're going to tell $chatgpt$ all the constraints you have in place

and you don't have to do any agent based modeling. You can just get the output from GPT. So that could be that could be a potential risk.

livia 33:32
Thank you. And lastly, whose work do you admire in the token engineering space?

Participant 22 33:40
So very specifically, $name$. Have you spoken to him yet? Yes, yes. Okay. So it's fantastic. Like, the first time I met him on you had a starstruck moment, because because he's like, well, this person they've been reading all his papers. It's just their inbetween. He is fantastic. I love him very much and really respect his work as well.

livia 34:09
So is there anything else you would like to share?

Participant 22 34:15
No, I think that is good. I don't know what I think one of the things is regulation. Right. And I don't know what regulation looks like. I don't know how to impact regulation, education be a big piece of it. But education alone is not enough. There needs to be a lot of partnerships with other people in the space. And I don't know who is the right person championing that?

livia 34:39
Is there maybe for us to help and the outputs of the study? Do you see specific places where you need the input from lawyers or where like, if you could describe what is the help you need? Or where are the places that you're feeling? Stuck? In terms of regulation? What would that be?

Participant 22 35:09
The thing is, it's not like it's not exactly where were the lawyers can understand that, because the lawyers are constrained by the regulation. So the lawyers just follow what the regulator's state. I think a more interesting thing is to work with lobbying groups to lobby for pro token legislation.

livia 35:32
That's a very interesting point. So bringing people from the industry from the token engineering industry to form this lobbying groups.

That's great. Oh, thank you so much, Thank you very much. Yeah, it was a pleasure to chat with you. You're recommended by many people we spoke with, including $name$. And it's, it's great to have your

Participant 22 36:09
thank you. Yeah.

livia 36:11

I'll speak to us and yeah, I'll be sharing the results. Okay. Thank you. Bye bye. Thank you. Bye.