# (cleaned) Participant 31 and TE Study

Livia 0:30

So can you share a little bit about your personal journey of how you got involved in your field of work?

# participant 31 1:35

Yeah, um, back in 2015 2016, I was in online advertising. And I got into online advertising because before that I was in gaming. And it was as a developer, I launched a game when I was working at a company called \$name\$. The game was \$name and it was somewhat successful and that really got me interested into not only like interactions and social interactions, but like, what is it economics that drive the internet, I never really, as a developer, thought about the economics and really was about advertising. So that's why after launching and being in the gaming industry for a while, I really wanted to understand what was curious about what drove the economics of the internet. And when I thought about it, I was like advertising is actually the like smallest form of micro transaction there is and so that got me interested in payments. And then just by kind of timing and luck, I you know, was dabbling in \$Bitcoin\$. And then I heard about \$Ethereum\$ and then from my interest in online advertising, and then at around that time, I was just fascinated by \$name\$, I think this was like 2016, and I thought, oh, in online advertising, the biggest issue that happens is discrepancies between impressions with different providers, if there was one canonical database that everyone can draw upon for these microtransactions then we can get rid of all this like discrepancy and fraud and that got me kind of into a rabbit hole in terms of scalability. And so went from \$Bitcoin\$ to then \$Ethereum\$ because of the power of smart contracts and \$name\$ and these micro payments got me interested in you know, what are DAOs? And what are scalability concerns? Because from a technical perspective, I quickly learned that at that time, this is like 2016, that scalability was an issue and so I then was involved in a project called \$name\$, where we were trying to tackle online advertising fraud. And that led to co writing a white paper for token curated registries. And so with that, kind of, in kind of background wise, I thought, Okay, well, what what comes after token, curated registry is talking a TCR is really just kind of a very high level like Dao in disguise. Essentially, it's like governing what can be on and off the list and so with that, you know, helped co write the white paper for \$name\$. And so really the innovation there was this concept of rage quit. And so, got that going and then a year after that, help release the I was VP of Engineering at \$name\$ help bring out the first payment channel on Main net \$Ethereum\$. And so was coming out of like a kind of a technical kind of coordination, perspective, and thought that tokens as an incentive alignment could help reduce coordination. So you know, just thinking about it from that perspective. And so, from that, I thought, Okay, well how do we coordinate kind of mainstream adoption? So I went from payment channel L to technologies because at that time when we launched this was like 2017/2018. We there were a lot of there was a lot of innovation happening. I think it toward the end of 2017 \$name\$ white paper came out. \$name\$ and \$name\$ wrote a co wrote a white paper regarding \$name\$. So got into that, and then that kind of turned into this dead end. And then, you know, I thought, well, instead of focusing on layer two, I wanted to focus on just mainstream adoption. So had got fascinated with like, account abstraction This was before this current \$name\$ was more about meta

transaction. So after helping launch \$name\$, helped launch \$name\$ that meta in the meta cartel was meta transaction. Thinking about mainstream adoption would happen through these series of decentralized meta transaction re layers, which is actually now kind of more formally in a spec with\$ name\$. And then we also had this gas refund network, which is now the bundler or the paymaster service in 4337. So I was working on that. It was called the \$name\$. But this was like 2018, kind of previous a bear market. And so there wasn't a lot of adoption. So we went from this SDK into trying to widen the I guess what it means to be a developer. So we turned the SDK into a no code tool. From that no code tool. We created this bot called \$name\$, because this was like at the beginning of COVID. We needed a way to verify membership in a Dao automatically so we checked your on chain asset holdings when you map your telegram, user name to your wallet address. And this \$name\$ was a reference implementation for no code tools. But the bot itself kind of took off. No one really wanted to use the no code tools. They just wanted to use the bot. So we focused on the bot and three years later, we just had our three year anniversary of of \$name\$, actually. And, you know, we have 50,000 tokenized communities that we helped manage. We have close to 9 million verified wallets. And, you know, we now have a \$name token\$, which is going back to kind of a lot of the principles that you know, we described and token curated registries, so the \$collab lead token\$ helps secure our mini app marketplace for \$name,\$ and now circling back to how do we do mainstream adoption. So we are kind of big proponents in terms of decentralized identity, but trying to make sure that it is approachable. So we partnered with [lip protocol], we have an MPC network that we use to allow users in discord to claim a noncustodial wallet, but no one sees the private key not even the end user. And so we are now looking into how do we use this decentralized identity for as a signer for account abstraction. So this is all kind of coming back full circle, if you will. It's just that I think you know, these ideas that we had I had were maybe three or four years too early. I don't know if we're still too early, but it seems like from an ecosystem perspective, now that we're almost halfway into 2023 seems to be gaining adoption.

#### Livia 9:34

Wow. That's a fascinating trajectory. And I really appreciate how you're able to link step by step into this full circle. And there's so many, many meaningful developments that came out of it. That's Wonderful. Thank you. And how would you define token engineering?

## participant 31 9:55

I would just define it token engineering is just at the most broadest level, just game design, incentive alignment.

#### Livia 10:09

Awesome. Yeah. What do you think about the word engineering in it?

# participant 31 10:16

I think engineering has to do with using math or other scientific principles. To be able to explain the incentive mechanisms that occur. I think that it's different than token economics, which have to deal with more on a sociological or economic perspective and I appreciate the word engineering more than economics, because economics has a root of assumptions. Where, you

know, I think in general economics, it's about scarcity, where I don't know if token engineering needs to assume that first principle of scarcity, specifically, and it's really about describing the flow of the token, which then touches upon like incentive alignment. So it's, I think, more descriptive, in terms of the flow rather than being explaining that the sociology behind the motivation between the incentive description

#### Livia 11:42

Awesome, yeah, it's great to have that critical look on economics too. Is there something you would say that is unique that token engineering is solving that other fields are not solving? Maybe you explained a little bit already in this differentiation of token economics, but is there something you think is like unique of token engineering?

# participant 31 12:07

I think token engineering takes I'm assuming this so this may be me bringing my confirmation bias, but I would think that token engineering has a context that these are fluid tokens that are on the internet. That are blockchain based, where, you know, settlement times and the interaction between smart contracts. There's this kind of underlying assumption of composability that and fluid pneus and liquidity that may not be the assumption when you are inheriting words like you know, economics or you know, you have economist looking at that are more formally trained and economies. So I think that there's kind of this, less of an I would say unlearning, of context that applies when you use the word engineering versus like words like economics.

#### Livia 13:18

That's great. Thank you. I'm curious about what is your daily work routine. So what are examples of some tasks and rituals and processes that you handle daily?

## participant 31 13:30

I'm CEO of \$name\$. So it's a lot of I think, in a nutshell, my job is coordination reduction. And whether that means being in meetings and helping connect people or getting out of the way so that people can easily or more easily connect. It's really reducing the coordination tax. So I'm in meetings often and I also have experience as a developer, so like, for example, this weekend, I'm going to have to develop a front end because I know that other people on our team are busy and it would take more for me because it's not a large task. It took longer for me to explain and coordinate than it would be for me to actually then do the work. So knowing that my job is coordination reduction, that I will just take that work and do it myself, because it's not such a big task. But other than that, it's really just a lot of it's being in meetings dealing with organizational issues, maybe some technical issues like we are deploying a feature or product is brand new, integrating into this MPC network. And then how does that from a product side or from a narrative? How do we, how do we make it easy to explain from a user perspective? How do they go from a decentralized identity into proper account abstraction? What does that mean and how to boil that down? Because again, coordination reduction is part of it is like mass adoption, right? So like, how, how do we explain this so that we get people coordinated around this product or these features as quickly as possible?

Livia 15:15

That's for your marketing background was come so in handy.

participant 31 15:19

Yeah, it's multi disciplinary. Yeah.

Livia 15:24

And maybe, since you've been in this coordination role, you might not use so many tools, but what would you say are some tools that are used in the process of token engineering?

#### participant 31 15:36

I use from like a description of what you can do when a flow of tokens like my tool is called \$machinations\$. And then from like, diagrams and visuals I use \$miro\$ and \$figma\$. And then from like a dissemination of information, we use \$notion\$, and then for tracking of technical tasks, we use \$GitHub\$. And then from like a chat perspective, I live on \$Discord\$ \$telegram\$. And \$Slack\$. So those are the tools to communicate and yeah, trying to just use the right tool for the right job.

Livia 16:20

Thank you. Can you give two examples of polar opposites? Token engineering projects that you've been involved with?

participant 31 16:30

Token engineering, two polar opposites.

Livia 16:35

Yeah, maybe two projects that have that are very different from one another, but they are both token engineering projects.

## participant 31 16:46

That's a great question. I would say that \$name\$ would, it was a grant giving it turned from like this meta transaction and it quickly turned into because it was launched. In the bear market into a grant giving Dow. So like, that was completely different. There's like, just giving out tokens. There's no incentive alignment in terms of those that are giving out shares which are tied economically to the Treasury. There's no feedback loop. It's just all kind of one way and the only way to increase the Treasury is to try and increase people to pay into to be members. And so it was really kind of this social construct. And I would say that the polar opposite would probably be \$name\$, where it's we are \$Colorado Co Op\$. And so with that being a \$Colorado Co Op\$ there is an incentive for us as a core team to build out products that in the co op terminology, have patronage and so that, you know, those that are interested in you know, a self sustaining, decentralized marketplace, that there actually is revenue that can be generated. And so those are polar opposites. Were met a cartel it's purely 100% grant giving, and with the \$Colorado co op\$ for \$name\$, it is a commercial entity.

#### Livia 18:32

That's super clear. And moving to challenges. What are some challenges you faced in your work personally when we token engineering?

## participant 31 18:45

It is second third order effects of incentive alignment that are kind of unknown until you actually deploy. And so it's one of those adages of like no plans survive contact with reality. So no matter how well you construct or you understand what the incentives are, there are always people doing things in ways that you don't expect them to, to behave. And so early on, like with \$name\$ is a very simple mechanic. And what we wanted to do was be fully prescriptive of like, everything that you can do, but knowing that it's really hard to anticipate and think of everything that someone can do and what their motivations or their incentives are. I've come to learn that it's probably easier to just do things incrementally. And so you want to launch a token with some type of incentive alignment, some type of utility, but then you don't have to understand like, the whole breadth of what that utility will be. Yet and as the market changes, you can adapt. So for example, when we deploy our MPC technology, you know, we thought okay, initially, it was going to be giving out wallets to all of those that are in a \$name\$ manage \$discord\$. Server, but then we've modified it so that it's really just instead of saying that it's a wallet, which changes the incentive design, we saying that this is your decentralized identity. Why because in the last year, two major things have occurred that we could not anticipate. One is the rise of Al. And so we want to make sure that like, yeah, Al is great, because, you know, there's some so much productivity gains, but it actually could also be used as a weapon of mass creation. So, you know, if we fast forward and go into the future five years from now, how would you know that I'm not a synth? Because maybe the AI is so good at, you know, the voice replication and maybe even modeling of 3d that you would not know that this is really \$participant 31\$. So what we want to do is take a defensive position and like this MPC of technology, instead of saying that it's your wallet, we say this is your identity. And that also dovetails well with what's happening with \$EIP 4337\$, where you can actually have a signer into, you know, a proper account or account abstraction. So instead of having something that's ELA or key base, hold your funds, you're actually using an account. So this is why you want to be able to understand what you're doing and your values aligned and driven that way, but the exact implementation may change over time, it could happen guickly. And so this is where instead of being fully prescribed and saying this is exactly how things are going to unfold over time, we say this is our next step. And so part of it is just you know, making sure that you stay flexible and can adapt. But then again, you know, as this kind of roadmap changes, what are the second third order effects of like changing decisions? Because there's also this all, you know, human kind of perception, kind of in general, with like, oh, you know, this is not what you set out to do. So you have to be careful how you state publicly what you're doing. Because then you know, you can get valid projects can be considered rugs and all this kind of stuff. So a lot of what I've experienced is this like okay, don't commit too much. Don't be fully prescriptive, and just embrace building in public.

super interesting. Yeah. I appreciate that advice. It's, it's, it sounds like advice for future token engineers to grab on. What are the common pitfalls when practicing token engineering? I think you mentioned a few already, but are there some more specifics?

## participant 31 23:13

hubris, I think it's the biggest thing, knowing what you're doing and not being humble enough to like say here are the challenges these are what we are trying to solve. And then not looking at it kind of in a multi dimensional perspective. Because, you know, for better for worse. For projects that do have a token token is actually marketing and so having a mark, I mean, maybe this is my bias from my experience, but you know, first things, first thing people do is look at the token price and like try to understand what's going on. And that's just maybe, hopefully not the reality years from now, but that's the current reality. So being able to look at things in a kind of multi dimensional way. And it needs to be when you talk about token engineering, I think you need to be you know, as as as open minded as possible.

Livia 24:16

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

participant 31 24:22 to for the what, for the field of

Livia 24:25

token engineering to address like, Is there something you you wish to see happening?

## participant 31 24:32

Yeah, you know, it's really not thinking about it just in a purely and this is kind of contradictory of what I said before, a purely scientific way, right, having a broader context. And it is understanding that, especially like right now, how do different disciplines interact. So instead of it instead of thinking about it from like, oh, in just an engineering perspective, which I appreciate, but at the same time, I think it's more like getting your bachelor's degree and token omics or whatever you want to call it? Right? Because I think you need a smattering of of, of different disciplines without losing that kind of core kind of scientific method behind it as well. So that it's more data data driven, instead of thinking about it from like a closed loop situation. Just from like, the kind of, you know, your faucets and sinks, thinking about it more broadly in terms of societal impact of what that the context of that token and what you're doing there.

Livia 26:02

Can you expand more on the areas of knowledge that you consider to be important to be a practitioner?

# participant 31 26:10

I think it's really understanding. For example, I think that there's like, practically speaking in the diagram of like, let's say the Etherium ecosystem, you have DAOS, you have Defi and you have NFTs. They should all kind of be the same thing. But the types of people and the types of kind of

ways of thinking for all three of them are, are very different. I think that Dows and D fi kind of Merge or Consolidate a little bit more when it comes to governance. But I think that is driven by current state of the regulatory landscape, rather than it happening naturally. And I think NFT communities are more about kind of culture, and what's going on kind of more broad, but there isn't this kind of convergence of all three together. So it's, I don't know if it's like an academic discipline, or if it's more kind of like the people that are being attracted to token engineering. I think it needs to be at the surface area needs to increase and, and have different our diversity of perspectives that I don't see kind of exist right now. Because I think it's more kind of at this point, more academically bias that at least that's my perception.

#### Livia 27:41

So talking about diverse perspectives, do you have any thoughts on how to increase diversity and inclusion in the field?

# participant 31 27:51

More memes make it more approachable, more accessible. And,

## Livia 28:00

and what do you think is the role of ethics in token engineering?

# participant 31 28:07

I think it's, I think it's huge, my kind of philosophy here and this is how I approach every new technology brings in new moral questions. Whether it's like the advent of Industrial Revolution, when we go from rural to more like urban settings, what does that mean? What does that mean for like, how do you make laws when it comes to large populace? I think it has to do with like, automobiles, right? You have to or with AI, or with any any new technology, any new construction, where people can come together. It brings in new questioning, right, like, I think what I do not want to see is less versions of the web of the internet. I'm an engineer. I am tasked to increase engagement for my platform. The second order effect is that it affects people's mental health. I as an engineer did not see that coming. Were the algorithms that I was contributing to elicit hate or aggression. And I think that we can learn from that in terms of token engineering. This is why we need to be able to take a step back and this is why ethics is hugely important, because it's going to bring up new moral questions of what direction we go and it can affect a lot of people.

#### Livia 29:42

That's very interesting. I haven't thought on this way that this is a new it's like a movement bringing new moral questions. Do you know or have you thought of what are some of these questions?

## participant 31 29:59

That yeah, like, like pure, you know, we we deal with it and we grapple with it. We actually have. Every few weeks we have like a public discussion of balancing in public, right, where we want to engage people to us and have a decentralized ID for example. So how do we incentivize oh,

maybe we give them some tokens and then you're like, Wait a second. You're just you're you're Are you incentivizing How are you incentivizing them because like, you're just gonna get a horde zombie AirDrop farmers coming in bouncing in and out. Right? So it's like, what is your time horizon when you when you're looking at incentive design, and you have to have constructive conversations around that. And that requires someone that's not just in it, like a developer that's developing the product right? And it's about coordinating reduction. Because you if you have people that are multidisciplinary, they can actually balance this out, rather than having 15,20,30 meetings, being able to like, teach and acknowledge, you know, so I think that more proper kind of training, I guess, like a Bachelor of Arts kind of mentality, where you have some training in legal current regulatory environment, some in engineering, some in sociology, economics, all this as well as development so that you can understand kind of how this all balances and every individual can bring that perspective to the table, I think is, I believe will be important.

#### Livia 31:43

Yeah, that's something we've been grasping a lot from the interview said token engineering is not one. One role is not one job. It's probably many people, a big team type of process. And in your perspective, what are the incentives should be a practitioner token engineering?

#### participant 31 32:06

The incentives is, I mean, kind of at the broadest level, moving humanity forward. You can't stop it. Right. So an example of this would be like, the argument now for AGI right, artificial general intelligence, we know it's coming. Like oh, there's this movement to try to stop it. But like, how do you align all of humanity? That's a big coordination issue. Right? Everyone has different incentive. So it's, it's a big, big problem. So enough of an awareness of the problem that like people are saying, Stop it, but I do think it can be solved it will need to be solved. Because it's going to happen. So you know, my aspect or my perspective of it is like, well, in how do I, how can I affect change? Well, we need to have these AI agents in DAOs sooner than later and break the problem up. Because I think this kind of artificial general intelligence will probably be in one Dow at a time, and then then you can get worked out and you can actually then build up these primitives. So I think it's Yeah, I think it's important to, you know, move things forward. But then break down the problem into discrete like dice chunks, as you know, it can get quite overwhelming. But like if there's an opportunity to be able to solve like, existential issues, like climate change, I think we need to you need to kind of move forward in it in not aggressively but in a way that is iterative and can move things for us. I think that's that's going to be important.

## Livia 34:11

Yeah, there's a great intrinsic incentive as well to being a practitioner, right. Yeah. And this is something we're asking every participant to try to understand the financial perspective of the field as well. So what would you say the average salary of a token engineer?

participant 31 34:32

Oh, I think I think the average is quite low, because I think there are a few people making a lot of money but a lot of people doing this that aren't recognized formally. That actually helped move the field forward. So if I wouldn't put a price or \$1 amount I would say 70 - 80,000 USD a year.

#### Livia 35:01

Thank you. Yeah, so moving to the future. What do you wish to see for the future of the field? How do you see in the next three years?

#### participant 31 35:16

So the next three years I wish, what would I wish to see? I wish to see that in the next three years, that the kind of impact of artificial intelligence have to incorporate tools like LLM's into the design of tokens. Assume that it's not going to be humans that are going to be involved here. But there'll be jority of them bots that are that can make decisions at scale, that have more data processing power than any one person can have. So we need to embrace that, that the majority and I think we're close to it, if we're not already there, majority of the trading will actually happen automatically, or will happen using Al. So token engineering should like think about Al agents sooner than later, rather than just human beings on the kind of incentive and what does that mean, in the next three years, but further out in the future, is really trying to get and I think we have a generation of gamers that already have a better implicit understanding of economies in the context of games. So formalizing this token engineering, like in school as soon as possible.

#### Livia 36:43

Yeah, that's, that's definitely big. And actually, AI is part of one of our questions, too. So as AI continues to advance and the potential that you're already describing, it has to impact token engineering and its implementation and development. Do you see any potential risks to that happening or what are some of the things we should be aware of or also, what is your role in this intersection?

#### participant 31 37:17

I think humans have a really hard time and for token engineers, to understand when and what it means for things to go exponential. Like we've just come out of COVID and humans did not understand that exponential reality of a virus spreading. Right. So I think that it's really hard to think of things in exponential timelines. The thing about AI, I think, is that we'll have previous versions of AI help produce future versions of AI. That's just the nature of the technology. So we're talking double exponential curves. So it's really hard to understand the rapid change that will take place in the next couple of years. And so you know, what I'm doing is just, there's no use in like, trying to fight against it. Or really even having long term studies. What I've kind of deduced is that the only way to really like understand this is to now instead of build some study something something and then release it. You have to flip out. You have to build in public. And so that's how you learn. And I think that's this kind of mindset when it comes to an approach and discipline, because no one knows what's going to happen in the next three years. So we want to be very careful about the second third order effects of what we're producing. So we have to be mindful of that, but it's leading with doing rather than leading with just like okay, because by the

time you've kind of figured things out, if things are going double exponential, it's already going to be obsolete.

Livia 39:14

Yes holding tight for what's coming. Yeah.

I appreciate so much how eloquent you are. And I'm curious in from your perspective, what are the step by step of the token engineering process? Like what would you say how from beginning to end? How do you build a token economy?

#### participant 31 39:39

I would say that it's not something that you can prescribe because one of the first steps is just you have to start with a community with a common cause. And then from that, is there a way to then experiment with a token? So you start with the people but like, you can't start with thinking that I'm going to launch a token. You have to start with something that you believe in or something that you can find internal intrinsic alignment on and find out if a token, which is this extrinsic kind of skin in the game call or instrument can be applied to this or not. So I think it starts with a group of, you know, individuals or people online, a community and then kind of figuring out if there's a way to it does make sense to actually then have a target, because then then you can, if you have that common group of people that are aligned already without a token, then you can then bring a token to it. So the way I think about it, if you were to say that the token is not the meal, it's the seasoning. It can bring out the flavors of food, but you can't you can't be nourished by just eating salt. It can enhance what's there. Already, if that makes sense. That's kind of how I believe so it's, there's no like, direct path to like having it token. I don't think that's the right construction or even the mental model.

#### Livia 41:25

And do you have any hint to when you need one?

## participant 31 41:29

When you have to have one? When there's no other way to align incentives. It's the incentive of last resort

#### Livia 41:41

that's, that's awesome. Thank you so much. And then the last question is, whose work do you admire and the token engineering space and who would you recommend we talk to next?

# participant 31 41:53

Um, I think it's really interesting. I would say at the highest level it would be like the \$name\$ and how they managed like \$name\$ as kind of the spokesperson or the figurehead there, and how that's managed, I would say there would be a \$name\$ is really someone I admire as well. When it comes to alignment. I would also say, trying to look up the name I forget, I can't believe I forget his name. And get it to you \$name\$ I think he's the one that introduced us. I I respect him a lot. And he's, you know, come from AI or machine learning background as well. So I think he has a

lot of kind of similar thoughts. Who else? There probably isn't anyone else that comes to my mind at the moment, but I can get back to you if I think about it some more.

Livia 43:03

Awesome. That's so great. It was really wonderful to to listen to you and to get your perspective. Thank you so much. Yeah.

We'll share results. When we have them. It's going to be probably around a month or so we'll have the first draft of the analysis and we'll share with all participants.

participant 31 43:24

Awesome looking forward to it. Thank you so much.

Livia 43:27

Thank you. You too. Bye bye.