# Cryptocribs, the 'Airbnb' blockchain for vacation rentals launches – exclusive interview



SAN talks to 'Erasmus', the co-founder of Cryptocribs.

Follow @ServAptNews on twitter and stay up to date with the latest news and results

Follow

#### SAN talks to 'Erasmus', the co-founder of Cryptocribs.

## What's your background?

"My co-founder Serge and I have always been driven by intellectual curiosity and a robust willingness to learn. I think this is key to understanding our backgrounds."

"I started off in finance, working for different investment banks. When the financial system collapsed in 2008, I realised how fragile the legal architecture underpinning the financial system was. That's when I became obsessed with learning everything about the law. To me the law was like this poorly coded back-end of the financial system which needed fixing. So I started again from scratch and mainly self-taught myself through law school in two jurisdictions. At this point, lots of people already started rolling their eyes, as they couldn't understand why I would give up a finance salary to pursue intellectual interests. But I've always optimised for learning rather than traditional career progression or social status. A few years later, I was working for a corporate law firm, which was intellectually stimulating, but I wanted to work on more groundbreaking ideas and in a more systematic manner, ideally with data and code. This desire was what got me to pursue a Ph.D. programme at the Swiss Federal Institute of Technology (ETH). The past year, I've spent in Silicon Valley and New York, collaborating with and learning from some of the brightest minds from technology, venture capital and academia."

"My co-founder Serge is a real character. In his early twenties he became a local music legend, back when hip hop culture was still a big thing. After his early years of success and fame, he was running his own music production studio. But at the age of thirty he had this sudden urge to receive formal training in mathematics, so he went through a very rigorous academic training at ETH Zurich. After graduation, he's been working for a number of financial institutions, both as a financial engineer and as a software developer. He's started angel investing with every penny he could put aside, but he's really a builder at heart and together we've been rolling out web applications for quite some time now. He has this unique mix of creativity, random silliness and structured thinking, which makes it a real pleasure to work with him."

#### What gave you the idea to launch CryptoCribs and why specifically for the vacation rental sector?

"CryptoCribs is a service I've really built for myself. I have always been excited by the idea of staying with locals when travelling. Long before Airbnb, I was sending out emails to complete strangers I found through Craigslist. Of course it was significantly cheaper than staying at a hotel, but I mainly enjoyed travelling peer-to-peer because it allowed me to meet real locals and see the city through their eyes. There was the documentary filmmaker from Barcelona, the cybersquatter from London and the philosopher from Amsterdam, to name just a few awesome hosts I stayed with before Airbnb. When Airbnb came along, they significantly improved the process of quickly identifying trustworthy hosts through their two-way review system. This review system allowed the flat-sharing market to flourish, which was a major development. But their tremendous success also set them up as a quasi-monopoly in the short-term rental space. Today, they basically operate and monetize a large-scale centralized data silo, which makes it really hard for people to travel peer-to-peer without them. For example, I personally trust all Airbnb "superhosts" enough to be willing pay them directly and avoid the high Airbnb service fees, which can be up to 20 per cent."

"However, Airbnb doesn't allow for such direct bookings and/or payments. In fact, they even censor the messages between guests and hosts by blanking out phone numbers and emails. But censorship has never worked for long and the walled gardens set up by Airbnb was something that really started to bother me, not just as a guest but also on a more ideological level. I get that having raised more than \$3 billion in funding at a \$31 billion valuation, it's unrealistic to expect them to fundamentally rethink a working monetisation model. In other words, they are facing the quintessential "innovator's dilemma". But I am personally convinced that the tremendous trust value created by the Airbnb community should be handed back to the community that created this value in the first place. CryptoCribs is a project that aims to do this through a grassroots movement, it is aimed at breaking up existing data silos, empowering people and liberating markets using blockchain technology. Even if this never grows to millions of users, it's a product and community that I always wanted to exist in the world. In fact, I am so excited about this community that once we get to enough listings, I will travel around the world for a year living only out of CryptoCribs."

## What is blockchain technology, how is it related to Bitcoin and Ether, and what is its disruptive potential?

"Blockchain is the core technology behind Bitcoin and Ether, the two main cryptocurrencies. To be clear, the technology itself has applications that have nothing to do with cryptocurrencies at all. It involves several important technological discoveries, particularly in the areas of distributed computing and cryptography. Technically speaking a blockchain is a public record, maintained by a network of distributed nodes without a central authority using a cryptographic protocol to record transactions. Think about it like a database that is held by everyone with an interest in the data, instead of one central data administrator."

"In the context of Airbnb, much of the company's value derives from the centrally administered transaction and review records, which allow travelers to gain trust in a host located somewhere on the other side of the planet. These data records have been created by millions of users, but they are centrally administered and monetized by Airbnb. Blockchain technology has the potential to disrupt this, because it allows this data to be shared with the community in a cryptographically secure manner. Anyone can monitor which transactions are completed and when. User data, however, is encrypted. The technology is so revolutionary because it allows different parties that do not naturally trust each other to share critical data without requiring a central administrator like Airbnb. So ironically, if we succeed at this, we will ultimately disintermediate ourselves as the community can govern itself autonomously. This is what we are working on."

#### I understand it's a ledger, but what does blockchain technology really mean for vacation rentals?

"Obviously, a blockchain can record a range of different data points, representing all kinds of transactions. We are building a blockchain that records the booking and review data of "trusted nodes", meaning guests and hosts who have established themselves as good and trustworthy community members. This works through what is called a "smart contract". Smart contracts are agreements that are facilitated, verified and enforced through computer code. In our case, this smart contract is pretty straightforward: when a host accepts a booking, both he and the guest are granted a permission to leave a review after checkout. Basically, this is what Airbnb currently does in a centralized manner through its platform. However, in order to leave a review, Airbnb requires you to process payments through them and pay them service fees. With our solution, once we've vetted you as a trusted node, you can leave a review and don't have to process payments through our platform or pay us any service fees. This enables genuine peer-to-peer transactions."

#### Describe the CryptoCribs product offering, and who is the customer?

As you can see, the vision behind CryptoCribs is potentially quite disruptive, but it's probably still a bit too complex for the average consumer. What you want on any two-sided marketplace like this, and on any good fire for that matter, is a solid, small base of kindling. We want to get a core group of users to really love our product and who understand the larger philosophy behind it. So with our current product, we specifically target techies, crypto enthusiasts and digital nomads. We offer the same basic functionalities as Airbnb, but the preferred payment methods are cryptocurrencies. This makes sense from an ideological perspective, as a genuine peer-to-peer rental marketplace should operate on a peer-to-peer currency. It also makes sense from a transaction costs standpoint, as cryptocurrency transaction fees are typically lower than Airbnb's fiat payment processing fees. However, we also have a Stripe and PayPal payment option for users who don't have a crypto wallet yet and want to use CryptoCribs as a way to learn more about blockchain and cryptocurrencies. From a pure UI/UX perspective, it is important to note that our live platform is much more advanced than what Airbnb started out with. Our site is built on a really modern technology stack, incl. Node.js, React, Redux, GraphQL, Apollo and Express, which allows us to easily scale this as we grow."

#### How does somebody list their vacation rental as a host, and book as a guest using CryptoCribs?

"Both from the host and the guest side, the process is very similar to the one you're familiar with on Airbnb. In fact it's in some ways it's more convenient for users. For example, you don't have to provide any sensitive credit card data and fear hidden credit card charges. All you need to do is provide your public Bitcoin and Ethereum address. Also, if you're already hosting on Airbnb, you can just send us the link to your existing listing and we'll set it up for you. As I said, our preferred payment methods are cryptocurrencies, but if you don't have a crypto wallet yet and want to become part of the CryptoCribs community, you can send us an email and we'll either help you set up a wallet or we provide you with a PayPal or Stripe alternative. This is in the hope that within a few initial bookings, a crypto traveler or host will convert you to crypto. Also, we have iCal sync, so that you can list both on Airbnb and CryptoCribs. So even if you just rent out your place through us once every few months, I can already be a nice alternative. Don't forget: if you had rented out your apartment for \$100 for just one night in 2011 and you had been paid in Bitcoin, this would now be worth more than \$200k. Of course future returns will not be the same as in the past, but I think CryptoCribs is actually a cool way of getting into crypto without any major investment other than renting out your couch."

#### How does CryptoCribs make money?

"As I mentioned above, contrary to the orthodox tech start-up logic, we don't want to become a centralized data silo which keeps monetising user data without any actual value added. But of course we need funds to scale and sustain operations. CryptoCribs primarily makes money during the vetting process of its members. As a new user joining the site, you'll pay a five per cent commission on the first booking, both as a guest or as a host. However, unlike with Airbnb, this fee goes down dramatically over time until there is no fee at all. With every booking or positive review, there is a reputation reward of 0.2 per cent. So let's say you're new to CryptoCribs and you take one trip and then host one guest. At this point, your fee for the third booking could already be as low as 4.2 per cent. We call this process "reputation mining". This is somewhat similar to the Bitcoin mining process, as the fee reward halves with every 10k transactions on the platform until it plateaus at 0.05 per cent. This allows us to reward our first joiners for supporting our project early on. We also offer a way for users to import their existing Airbnb 'reputation' onto our platform and receive an upfront commission reduction. The philosophy behind our monetization model is that if you provide value to the community, then the community will give back to you. Something that Airbnb has so far neglected."

## What challenges and opportunities does Cryptocribs' use of this technology pose for vacation rentals?

"While blockchains can be used as systems of record and are ideal as transaction platforms for the reasons mentioned above, they are comparatively slower than traditional databases. This issue of 'scalability' is a key challenge for any blockchain-based solution, but in particular for those with really high transaction volumes. To put some numbers to this: Bitcoin is currently processing a bit less than three transactions per second, Ethereum is doing five a second. This is still a far cry from Visa, which is processing around 2000 transactions per second. But for our sharing economy application, this is not as problematic: Uber gives 12 rides a second and Airbnb gets just three booking per second. So even the comparatively slow Bitcoin blockchain could handle the Airbnb volume, provided it would only process Airbnb's bookings."

"Another challenge is the following: We keep getting asked by experienced Airbnb hosts whether we offer the same \$1m guest insurance as Airbnb, which we don't do at the moment. However, what people often don't realise is there are lots of cases where their insurance doesn't actually provide coverage and that Airbnb didn't offer such an insurance before they had already had 25 million bookings. To mediate this problem, we make sure to vet guests as much as we can, e.g. through passport verification and by providing their existing Airbnb reviews. Also, guests and hosts can freely communicate on our platform and if they distrust each other, they can even do a phone call or skype. But of course it would be better to offer a similar insurance as Airbnb does. We therefore aim to offer an optional crowdsourced smart contract insurance system at some point, but we haven't really worked out the technical details yet."

## How are you looking to grow CryptoCribs, how is the company funded and are you looking for investors?

"We launched CryptoCribs just five weeks ago with some innocuous posts on Reddit early in the morning after rolling out the latest built. On the first day of the launch, we were the number one topic on both the Ethereum and BTC subreddits. This allowed us to quickly grow organically to more than 200 listings in over 30 countries. In the first few weeks, we've already received more than 80k visits and even had some bookings. However, as with any two-sided marketplace, we are facing the classical chicken-and-egg problem. So besides organic growth, we're doing the good old Paul Graham/Y Combinator "do things that don't scale", meaning we actually acquire hosts one by one. Our ambitious target is to be at around 1000 listings by the end of the year, so that travelers can hopefully already get a decent choice of around 50 listings for the larger metropolitan areas. We've found a number of community managers who are willing to help us reach out in key geographies. We're also lucky to be working with a very talented filmmaker from San Francisco, who agreed to help us convey our message more visually with a launch video and a web series that will be a techie version of the TV show 'MTV Cribs'."

"With respect to financing: We are currently still bootstrapping CryptoCribs, as we want to work out whether the unit economics make sense and whether there is actual product/market fit before raising any capital. Quite frankly, we would also be fine running CryptoCribs purely as a community project."

"We actually got more than a dozen offers for financing in the last couple of weeks and literally had to push some of them away. Many blockchain projects nowadays do what is called an "initial coin offering" or ICO. Basically, this means that a startup is issuing its own coin or token. Thes tokens are in many ways like shares, although everyone will tell you they are not to avoid falling under securities regulations. This year alone, startups have managed to raise more than \$3bn through this novel form of financing. Some of the investors approaching us wanted to convince us to go down the ICO route. But I'm very sceptical of this path, not just because many of these ICO structures are not properly regulated yet and may be subject to legal challenge in the future. I strongly subscribe to Marc Andreessen's onion theory of startup risks, whereby consecutive financing rounds are an efficient way of peeling off different layers of risk. Yet some blockchain projects have managed to raise tens and even hundreds of millions through ICOs without peeling away even the most basic risk layers, such as founder and product risk. Even in our travel vertical, we've seen blockchain projects raise insane amounts without an actual product, let alone users. It's a complete and utter joke if you ask me."

## What are some potential applications of blockchain technology in the broader travel and hospitality industry?

"There are potential applications of blockchain in other segments such as hotel and flight bookings which could provide significant value to consumers and businesses. Some of these are covered by the ICO projects I referred to above. However, we don't see these as being similarly attractive because the trust problem isn't as severe as in our vertical: if you stay at a hotel or book a flight you're always dealing with a business."

"One application that I'm personally quite excited about, tangentially related to the hospitality industry, are public land registers run on a blockchain. This could potentially make the profession of notaries redundant and allow for highly liquid real estate. However, applications like this require a top-down support of the governments to adopt this technology. One region that leads in this respect is the crypto valley in Zug, Switzerland, which is right next to where I grew up. Also, I've spent the last month in Dubai at the Dubai Future Accelerator and I was impressed by the financial support that goes into government-backed blockchain applications."