Cloudastructure

Facial Recognition, AI, Machine Learning for Cloud-based Video Surveillance





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Rick Bentley Founder & CEO @ Cloudastructure

ABOUT | UPDATES | GRAPEVINE | ASK A QUESTION

Why you may want to support us...

1. CEO previously founded a company acquired by Uber in 2015. CTO previously a CTO at another company acquired by Facebook in 2015.
2. Over $2.1M raised from strategic investors.
3. $10,000 monthly recurring revenue.
4. Enterprise SaaS model, charging per per camera. As we add more AI, we start to do the guard's job and can charge more.
5. We already upload 100,000's of videos per day. We are finishing the Upward accelerator this year and are targeting large accounts.

Our Team

Rick Bentley
Founder & CEO
Founded Tidewalk Inc, eventually bought by Uber. Raised eight figures of Venture Capital from VC's including SoftBank and W2 Merger. Full-time Advisor to Google X. Direct report to Andy Grove (father of Gil&) for 5 years.

Gregory Rayman
CTO
CTO TheFind, acquired by Facebook in 2011. Founding engineer and Chief architect for ITM Software, acquired by BMC. Founding engineer and Director of Software Engineering for Amazonia Inc, acquired by PeopleSoft (now Oracle).

Craig Johnson
VP Business Development
Former Honeywell General Manager, running a 200+ person organization with $50M in revenues, that consulted, sold, installed, and maintained security systems, Fire Alarm, and HVAC systems, in large, commercial buildings.

In the news

Rick Bentley, Cloudastructure
Company ideas can come from many sources. How did a stolen laptop transform into your idea for Cloudastructure? I was CEO/founder of Tidewalk. We had raised money from SoftBank and W2 Heaven, but left

Downloads

Investor Deck for 1.pdf

The Security Industry is massive.



Q: How many Enterprise Buildings have security cameras?
A: Just about all of them.

Even though video surveillance is a 10-figure industry, manned guarding is still three times as large as video surveillance. What if you could make the camera systems smart enough to do things even human guards can't do?

The guard at the front desk is doing two basic things:
i) does your face match your badge? (or did someone steal your badge and is badging in as you right now), and
ii) when you badge in, is someone "tailgating" in behind you?
We are working on doing that on not just the front door, but the side doors, back doors, document rooms, server closets... all the doors. 24/7. Computers never sleep.

But we have to start somewhere.

First we ship all the video to our Cloud, even this is hard because of bandwidth and other technical challenges, but we do it. Once the video is with us, however, we have a unique advantage over all on-premises solutions – we can run it all through large GPU's (Graphics Processing Units, faster than CPU's at handling video) running Machine Learning software that can start to see across 100's or 1,000's of cameras better than any single human can.

Next we index all the objects and faces in the video, much like how Google indexed the web. This means you can search through all your videos by tag: person, animal, vehicle, etc. and even individual faces – just like you can search the web.

Then, when we detect a person, we see if we can detect a face. If we can, we run that through a face recognition system. Now you can search be person/name/face. This is our current state of development.

We have a 1.0 door system that we are going to upgrade to our 2.0 and then, once integrated, we will be able to out-guard the human guards.

How bad are current systems?
We hacked our way into major Silicon Valley campuses.

Your RFID badge can be copied easily* from only a few feet away. Watch us do it here.



Think that's bad? When our CEO was at Google in 2010 they had the "Tailgater". It was some poor guy dressed up in an alligator suit. When you badged in, he would try to "tail gate" in behind you, without a badge. Dressed as a ridiculous alligator. At the all-hands meetings every Friday they'd tell the video of who let the Tailgater in that week. This is one of the most technologically advanced companies on the planet using alligator suits to try to improve their security.

Wouldn't it be better if... when you let someone in behind you, that you just get an e-mail a minute later saying "Here is the video clip of you letting in someone without their badge. Please click here to acknowledge receipt of our security policy". That would change some behavior in a week than an army of Tailgaters.

We're the last two servers to move to the Cloud.

Every company used to have an IT closet full of servers. Those servers have been moving to the cloud, and making each of those new SaaS providers billions of dollars in the process. Every building of every company has two servers still left in that closet: access control and video surveillance. Cloudastructure is moving these last two to the cloud. Once the data is in the cloud, we can perform our AI functions.



Traction

We've gotten to $10,000 monthly recurring revenue. We not only have a low churn rate at less than 5%, but we're also getting many new customers thanks to referrals. We're at about 20 customers now.



Upward!

It's hard for a small company to engage with big ones. That's why we applied, and were happy to be accepted, to Upward Hartford. They invested $200k in us and put us into Big Company sales mode.

They have a large number of corporate partners (graphic below) they set us up with. We're deployed with two of "smaller" ones and are working on some of the larger ones now. The program wraps up end of October but we'll still be working our new found contacts into 2020. Big companies aren't fast, but they represent a huge opportunity.



Upward Hartford partners.

Business Model: Saas (recurring revenue)

We found that we can compete with the incumbents by pricing by the door and camera per year. We make more recurring revenue that they do while still providing a lower TCO (Total Cost of Ownership) to our customers. However, we believe our higher level AI features will allow us to achieve security guard level pricing – which is much higher than what we charge now. We intend to benefit from this price elasticity.

The Cloudastructure hardware utilizes state of the art technology, delivered at a very competitive price that beats the industry standards and comes with zero maintenance or replacement costs with a lifetime warranty. Cloudastructure solution centralizes the management of access control with video monitoring and allows customers to scale geographically to multiple locations.

We're bringing AI for security to enterprise customers



> *While Cloudastructure we no longer have to run on-premises web servers. There are no holes in our firewall or port forwarding in our router. There is no reason why your physical security should weaken your digital security, but that's exactly what our last system from a major manufacturer did.*

> *Watching hours and hours of video to find the event we're looking for is no longer a thing. We just search by tag and get the video we need*

right away. Video Surveillance is useful again.

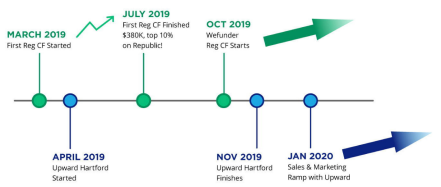
$2.1M raised to date from strategic investors

We did our first Reg CF on Republic, where we raised $380k -- making us a top 10% deal on that platform. We're here on Wefunder to hit our $1.07M SEC cap. If that goes as expected, we'd like to roll into a Reg A (pending SEC approval, of course). Building Enterprise services, competing with billion dollar incumbents, and selling to large companies all take some growth capital.

Feature Path

Tagger generates tags for every object it sees in the video. Things like "animal" or "person" or "vehicle"... Then, we let you search by tag. No more watching branches blow or cars drive by for an hour, just search by "person" and see only videos that have people in them.
Smartkey. Use your phone to open your door. It's more secure and you always have your phone with you. Likewise you can see someone live on video and unlock the door for them if they're locked out, dropping off a package, etc.
Face Recognition. Already working in development, Face Recognition tags all videos with faces recognized in them. You can search by known person (e.g. Patrick) or unknown person (e.g. Unknown123). "Hey, that guy right there who attacked that other person ... where else has he been on my campuses?"
(We'd be done by now but we pivoted from a Microsoft proprietary solution to an Open Source one for scalability/affordability/accuracy)
Multifactor. The guard at the front desk does two things, one of which is make sure your face matches your badge. We can do it automatically. We can also let you use your phone as a credential, even passively (e.g. phone in pocket, but GPS/LBS says it's near the door and/or the phone is on the right WiFi AP).
(In development -- we have to finish our 2.0 Access Control system first)
Tailgate/Piggyback prevention is the front desk guard's other function, they're just making sure no one "tailgates" in behind someone else who is badging in. Again, we can do this better with computer vision. On all the doors (side door, back door, document room, etc.) and not just the main lobby door. For a lot less than it takes to pay guards.
(Same as Multifactor)

What's next



We have a new go to market plan with the Upward Accelerator. We are in a good position to raise money on Wefunder. We think we're going to do great things -- we'd love for you to be part of it.

Investor Q&A

– COLLAPSE ALL

What does your company do?
Video Surveillance in the Cloud. Once the video is in the Cloud with us, we can run it all video through our Computer Vision and Machine Learning systems to see what's really happening.

Where will your company be in 5 years?
Any cameras, from a fixed video surveillance camera to a mobile phone to a drone, should be able to bring actionable intelligence to the Enterprise.

Why did you choose this idea?
I was running a venture backed company in San Francisco in the dot-com boom. We got ripped off, went to see the video and ... it was gone. Someone had unplugged the on-premises system, it wasn't monitored, nothing in the cloud, and we thought this was an old model back then. Now it's ancient but is still the standard.

Where have the last few years gotten you?
We started with Video Surveillance in the Cloud, but we found it wasn't enough to get the hockey-stick growth curve we all want. Adding Computer Vision with Machine Learning we believe will get us there.

Who are your customers?
Any Enterprise with multiple locations. If they have multiple locations, the Cloud-model is vastly superior to anything available on-premises.

How will you win?
Out maneuvering the dinosaurs.

What's next for your business and why are you raising money now?
We've proven the technology and the market, we need to pour on the coals to grow.

How will you use the funds raised on Wefunder to accomplish the next milestone?
Build out what we're selling and go about selling it. Enterprise sales cycles take more time than consumer or small business, and they have demanding requirements.

Who are you guys?
Dedicated serial entrepreneurs. Here is a nice piece about our CEO: https://republic.co/blog/rick-bentley-cloudastructure