Road Safety Innovation Podcast

Wed, 8/25 10:16AM 27:25

SUMMARY KEYWORDS

safety, autonomy, deploy, road, building, system, vehicles, ai, humanizing, human, safer, machines, variety, companies, accidents, automation, understand, camera, telematics, computer vision

SPEAKERS

Dave Braunstein , Maya Pindeus

D **Dave Braunstein** 00:57

Hi, everybody. This is Dave Bronstein, from together for safe roads. Thanks for joining us today for our innovations in road safety podcast. Today, we're thrilled to have my opinion is the CEO of humanizing on top me with us today. And together for safer roads in our work as a corporate social accelerator, bringing the private and public sector together to help solve road safety challenges and reduce traffic injuries, crashes and fatalities faster, is proud to work with companies like humanized autonomy to bring innovation to the space and really accelerate the impact that we need to have on our roads. So with that said, happy to welcome you my app. Thanks for joining us. Thanks a lot. Thanks for having me. So why don't we just started off, you know, straight and simple. Why don't you tell us a little more about humanizing, and why you started the company and your connections to transportation because I know you're doing a lot of incredible things in your business.

M **Maya Pindeus** 04:55

Yeah, happily. So at humanizing autonomy. We're building The global standard for human machine interaction. So what that means is that we build computer vision technology, we build models that help machines interact with people understand people in a lot of detail. machines, if you look at machines and a wider spectrum, we're talking about vehicles, a lot of urban infrastructure, we're talking about Roberts and factory halls and manufacturing facilities are constructed side, wherever there's a level of automation is really, really important. It's crucial that those machines understand people, for purpose of safety, to prevent accidents, to increase productivity, to increase trust, and just interaction between people and machines. So that's exactly what where we fit in with humanizing autonomy, we provide behavior is a behavior AI platform, can plug into any camera, all it needs is a camera. And with that, it understands and predict human behavior to help machines be safer, better, more productive, more trustworthy, and so on. The company was founded four years ago, now, really, out of London, we were realized that humans people were not part of the discourse when it came to AI. No one's really talking around people. And frankly, it's what we should be talking about how do we create automation, artificial intelligence that works with us, that works helps us helps make our environments better. And it became very clear for us that if this is an opportunity isn't an inflection point, to improve cities to make urban environments better, to use artificial intelligence for good to create ethical AI that feeds into a variety of automation systems to help improve service. And so this is why how we started the journey with humanizing autonomy. And today, our behavior AI platform is deployed in a variety of of systems and applications. They all relate to road safety, or most of them relate to road safety. It's deeply ingrained in

the urban spectrum, the way we talk about video, telematics systems and trucks and buses, dash cams, camera management systems, CCTV infrastructure, but also wider space, such as construction, manufacturing, to help increase safety to help reduce accidents and liabilities.

D Dave Braunstein 07:16

Wow, that's amazing. What a simple but brilliant observation, right? Just to make AI and autonomy more human centric, like, it's so it's brilliant, actually, I love it. And, you know, it's also one of the reasons why I really appreciate the work we're doing together, you know, because you're, you're so focused on in the transportation space, in particular, the human impact of transportation. And I love that. So can you talk a little more about your connections to transportation, safety, and know how that how that fits in with your vision? Yes, absolutely.

07:57

So if we think about it, every time we leave our houses or flats, we step onto the road, we encounter machines. So I think it's almost impossible. It's possible but rare that you take a journey from A to B by foot without a country, a vehicle or multiple vehicles, multiple types of vehicles. We interact with machines all the time. today. That means it's a situation with a pile of dirt we track with vehicles, we interact with drivers we track with public transportation and so on. Increasingly, we see AI automation as a massive opportunity to make some traction veterans safer. There's a lot of road injuries. There's a lot of accidents happening every day in cities and that can be prevented and a big opportunity of automations to help make vehicle safer pedestrian safer cyclist safer and this is where we fit in with a humanizing autonomy so the way the best way to imagine our product is it's a software rated invisible product but what it enables is that it helps for instance a driver and a track to understand enhance the vision and understand whether there's someone you know in their blind spot is someone a cyclist for instance, that might be a potential risk of a collision or a pedestrian or a variety of road shoes of Oliver roaches around them and with that take better decisions and with that prevent potential prevent an accident that is preventable. The same applies to people in personal vehicles, drivers and personal vehicles. The same applies to buses, of course trucks, commercial vehicles, heavy duty vehicles and so on. So what we do is that we feed this behavior AI software into systems such as video telematics systems such as camera management systems, so just drive the system and used to predictive element that human behavior and understanding and analysis that happens in real time. Wherever the camera is, and in action really the vehicle is in action. To gain this information and alert a driver and provide better information and with that, we can really bring road safety up. And because of this down, and which is a really, really important a beautiful thing of seeing how in an urban environment, we're actually able to bring make, make it better make it safer, make it more custom for someone that just wants to walk around and not have to worry around accidents wherever they leave their house. And so

D Dave Braunstein 10:25

and so in some ways, you're actually helping humans who are drivers understand other humans might be who might be pedestrians at the time. And vice versa, when we when we flip roles. That's really interesting. I and I love the way you guys have talked to educate us about the difference between physics and physics based predictions and behavioral AI and the difference. And so you can get to that a little bit later. I want to steal your thunder on that. But so with your your ability to help humans predict different behaviors and machines that are being operated by humans that to operate more safely. What's the business model? How you bringing that to talk about software? And you need a camera? But what's the business model? How do you get that into the ecosystem, so can do you know, the great work that needs to do?

11:18

Yeah, so whoever owns the fleet, whoever owns vehicle, whoever operates a transport system. For for safety, the city is a partner, whoever provides a bit of telematics system, a dashcam and Driver Assistance system, V track system is a customer. So what we do is that we partner with any with every every Transport Authority, every fleet operator, whoever has the need of making the vehicle safe to the making, making the city environment safe, I will partner with all of them. And we deploy with video telematics with camera management system attachment provided that allows us to, to very rapidly increase the safety of these systems, which is, which is a really beautiful thing. So in a way, this is most absolutely b2b, but that the reach of it really feeds into every fleet, every city every Transport Authority.

D Dave Braunstein 12:18

Nice. So it's a lot of different models simultaneously. But ultimately, together, we can have an impact at at the in those shared spaces that you know, call roads. But that's great. So talk to us a little more help our audience and me also understand what are some of the tougher computer vision problems are trying to solve like, because we now throw around the word AI, like everybody should understand what it means. But I've had a little bit of a split, I know enough to be dangerous. And maybe you can educate everybody about what it takes to really solve a tough division problem. And then, like in that help us understand, like, just contextualize it for us in terms of like our own behaviors, maybe.

13:08

Yeah, I mean, the tough problem we're solving is understanding people, understanding people from an image, essentially. So if you think about how we make decisions as human beings, whether we're sitting in a car driving or whether we're walking down the street, or we're a passenger, we will look at someone's actions. And then we can use computer statistical analysis in their head is like this. And this action means x, right? Someone doing XYZ incident, Mike cross the road, someone might be distracted, someone may be aware, and so on. So we're really good at doing that as human beings. So the challenge that we're facing onto humanizing autonomy is how can we use this human level or creative human level of perception from any camera image. So if we have any camera installed in a bus, any camera installed in a truck, and the cameras on and a roadside needs to be able to understand and infer human behavior and predict behavior as well. And that's a challenge. And that means that we work with a variety of observable and variable behaviors, things that can be extracted from video, and what is the I guess the secretory exciting challenge is? How do you infer what it actually means from a video? And that's really crucial for us because we can work today we can work on any camera at any hardware, where it doesn't matter where it's located. It doesn't matter what reservation doesn't make it. We're absolutely hardware agnostic. And, and bringing this level of, of human level perception. To work with any cameras is one of the tough challenges of AI, but also the ones that make it really practical and immediately deployable and environment Yeah,

D Dave Braunstein 15:00

Yeah, that's Yeah, so you're trying to predict, if you try to pick my B here, as I know that, that would be pretty difficult, but um, but at that time, it sounds like you can do it. And, and I've seen other, I mean, this area's very starting to become very robust. And it's great to see companies like smart companies like you all, working in the space. So, but the timing is critical, right? We have, you know, by most estimates, 1.5 million individuals, humans that are dying because of a traffic related crash, and many, many more times that number, maybe 50 million or more serious injuries. And so it's a pretty critical thing to try to impact this problem sooner rather than later. So what makes you optimistic that you and humanizing autonomy, and even the ecosystem of smart companies like you all, can get there sooner rather than later, to help us be optimistic. And this is a real solution we become

16:01

the absolute right timing is critical. And there's no need, I would be a mistake to delay deployment of advanced technologies to future business models to not make sure that to make an impact today, because there's a hell lot of accidents, and they're not going away without us doing something about it. So there's a couple of things that I raced on to try to answer your question. The one hand, it's, you know, mentioned is this ability to work with any system, I think that's absolutely critical. Building artificial intelligence building, predictive system that is able to work with any camera, when it's new, it's installed. And that's important, we can plug into an existing system that is installed in a truck already, it doesn't have to be a new model that has to be developed. So that's the speed to deployment, it's really critical. How easily Can you deploy this platform into something is there already, that's an important the other one is taking a system that is robust, a system that is able to feed have a large amount of data. So we as you know, we've built a strong ecosystem, that allow us to get high quality value and make sure that we train our system with a very diverse set of data so that we make sure that we are able to provide AI for all reduces all vulnerable road users and a variety of different environments, that's really, really important as well. So it's just mix of speed of deployment that what I call hardware agnostic, the data availability, and then ethics, building a system that people can trust, that is ethical, that is explainable where decision making, it's clear, it's really important for us as consumers, if you will, consumer, the end user of a system of such a system, but equally for the companies that actually integrated deploy, understanding why an artificial intelligence system takes a certain decision, we call it a white box approach will be critical in the speed of deployment. And frankly, in the trust that we will have an automation.

D Dave Braunstein 18:10

And so compared to say, two or three years ago, you see all of those elements coming together. Now we're at a tipping point where we're reaching the point where it can, things can scale, and you can plug into, on the on the opposite side of things, you can plug into more hardware, you can have access to more data, you have more companies that are acknowledging that your white box approach is the right one, and this is the way to go. And so it's sort of all coming together at the same time. It sounds like that's, that's really encouraging.

18:44

Yeah, absolutely. And at the time, it's really now I mean, there's we're seeing it, we're seeing Vision Zero, we're seeing regulations, and making safety systems mandatory. And a variety of vehicles really a lot of joint effort trying to increase Transport Safety. And at the same time, technologies that are more and more advanced and are built to be able to plug into Rogers systems, there's really a lot of different things converging and coming together to enable this this rapid deployment and that's that's really, really good, you know, good sign. Good thing to see for the community.

D Dave Braunstein 19:18

Yeah, absolutely. Absolutely. I mean, we, we've been living with this challenge of road safety for far too long. So when technology can get infused into the right communities, and it really has the power to scale. So that's, that's great to hear. So talk a little more about where you're doing work. I know you're doing work with us. And we're we're planning to deploy your solution in partnership with some of our members of together say for us, but where else, you know, are you making progress and like, you know, where can we expect to see crashes, injuries and fatalities fall because of the progress you're making? You know, just as a business

20:00

Yeah, so so we absolutely focus on the safety and urban environment safety in cities. So where you'll, you know, areas where you will, you'll hear from us other than, obviously, our own partnerships, our commercial vehicle safety, feeding into the telematics systems feeding into camera management system. So we work with a variety of transport authorities, fleet operators, but also direct telematics and camera management system providers around the world, a strong focus on Europe, and the US, and Asia Pacific, where we're being deployed. And we're currently deployed in incidents. And the direct link is every integration, every deployment has a direct link to bring in cash with this job to preventing accidents that can be prevented.

D Dave Braunstein 20:47

Nice, so your North America, Asia, that's pretty fast, you said you're only four year four years old. That

20:57

Yes, four years old, a lot about

D Dave Braunstein 20:59

you, and the business that you're building and your team and everything, but also says a lot about the appetite for these solutions that you've stepped back from the situation say, it hasn't been hard for you to get traction, of course, you have a role in that. But also there has to be an appetite for it. That's, that's incredible to hear. That's great.

21:18

It's a global problem. Every every country in the world has, has this problem. And technology is ripe. And and ultimately, we've made too many people are died because of accidents that can be prevented. And then there's a high level of awareness globally for that which is which is great. And ultimately, software like ours, a platform like ours is made to be deployed globally. Now we'll build the technology in a way. So we can deploy it across a variety of environment, a variety of nations. So that we're not that, you know, building it from it is from a scalable perception perspective from from day one. And that's, that's, I think, very important for for growth.

D Dave Braunstein 22:02

Nice. So you've talked about your partners and the areas, you're going to talk about Vision Zero, like all those elements, adding up to more traction and more impact. But but just thinking about it more from a just sales standpoint, like getting down into the weeds of like, Who is the most? Who the road safety community is your ideal buyer? Like, who do you really want to get close to? So and I ask this in somewhat of a selfish way, because even though we know you quite well, you know, we want to help, right? And we want this audience to know, like, you know, who should be reaching out to you next to say, hey, I want to partner with humanized autonomy, like who is the ideal partner and buyer that that might be listening to this podcast right now?

22:50

Yeah, so from our perspective of the biggest impact that we can have, as if we deployed the largest amount volume of of devices and their ideal customer, their partners, whoever can enable that we're making, really, I think, significant steps towards a really wide range of wide deployments, large volumes of vehicles on the street today. But obviously, that's where we're where we're at. We're earliest and we're we're expanding as a company. So anyone or any customer that has large plate, reach towards large fleets, is an ideal customer for us, really, because the software product is built for scale, right? Any camera, no hardware needed. And we deploy and we, and we bring, yeah, risk of accidents down significantly by doing so.

D Dave Braunstein 23:50

Nice. So I hope to get flooded with emails from because of this podcast that all of those people are out there listening and saying, I I'm ready. My let's bring humanizing autonomy to my community, to my fleet to my, you know, operation. Let's do this. We're ready. Yeah, that's great. I guess we can we can kind of wrap with like, what's next? Like, you seem like you have so much going on so much traction so much, you know, you're building such a great company. But what's next? how can how can those people who are listening really, sort of what what should they be looking for next from you? And And what if they're not quite ready today, then what are they going to be looking forward to reaching out to you next? Yeah, so

24:39

So I go, number one, and the work that we're doing now is heavily focused on making cities safer, more productive, more, hasn't really so really helping create those interactions created improving, you know, create better road safety, better, better environment, really. We're talking about the company vision As I think introducing the beginning of a podcast, we're talking about a global standard for human machine interactions. So that challenge the problem of human and machine machine being any, any any system that has a level of automation, can talk about it as a car as a manufacturing system with a construction equipment and so on, faces the same challenges. So for us, that means that human ID autonomy are behaving i platfrom, needs to be deployed into those heavy equipment materials into those other areas where safety is a challenge where, where automation is progressing and needs to progress. This is what's next. So it's really making sure that we have a strong impact in the urban safety community and urban safety climate and take those learnings and bring those two adjacent traditional markets that face the same challenges just with a different level of equipment with different level of automation, but can benefit from from humans focus, they are human centric AI to prevent accidents, liabilities, increased productivity, and increased trust.

D Dave Braunstein 26:15

That's great. Well, I know that I am looking forward to have enough to talk about the results, we're gonna get together on the pilot that we're doing. But I would also look forward to having another opportunity to talk with you and other people about how, you know, we can bring behavioral AI and the kinds of things we're talking with this global standard from human machine interactions, really talk more about where that might have even more benefit for our cities, for our communities, even we talked about cities, but you know, every community deserves to have the opportunity to benefit from these kinds of things. So with that, I think, thank you so much, Maya for joining me today. And like I said, I really look forward to be able to talk to you again, in person, and, you know, like this, about how much progress we're making together to keep the world's roads safe and just create better, more livable communities.

Maya Pindeus 27:13

Thanks, Dave. I look forward to it. Thanks a lot. All right. Thanks.