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SPEAKERS

Lis Malone, Steve Barclay, Michiel Janssen, Ryan Fleury, Rob Mineault

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R **Rob Mineault** 00:00
Hey and welcome to another episode of AT Banter

S **Steve Barclay** 00:05
Banter. terbang.

R **Rob Mineault** 00:09
I don't know how to respond to that. What just happened?

S **Steve Barclay** 00:15
Variety man. It's all about variety.

R **Ryan Fleury** 00:23
Sobriety?

S **Steve Barclay** 00:25
No, it's definitely not about that.

R **Rob Mineault** 00:30
Wow. Where was I? Hey, my name is Rob Mineault and joining me today, Mr. Steve Barclay

Wow. Where was I? Hey, my name is Rob Mineault and joining me today, Mr. Steve Barclay

S Steve Barclay 00:40
That would be me

R Rob Mineault 00:41
See you get rewarded for for the for throwing me off. There you go. Mr. Ryan Fleury is also here.

R Ryan Fleury 00:50
And that's me.

R Rob Mineault 00:52
And we also have Miss Lis Malone.

L Lis Malone 00:59
And back in the dungeon I go. That's right. But I got your name right. Was that Lis? There was a z sound. You have to resist your urge to make the z sound.

R Ryan Fleury 01:18
We're gonna ask the audience to rename Lis.

R Rob Mineault 01:21
Maybe I just need some voice lessons.

S Steve Barclay 01:25
Now taking suggestions for the rest of her life.

R Ryan Fleury 01:30
That's too hard to pronounce. The letters.

R Rob Mineault 01:37

Right, we'll make it a reality show. It will be like an extreme extreme life makeover, AT Banter Edition, and Lis will be our first participant. How's everybody?

S Steve Barclay 01:53

Jim dandy.

R Rob Mineault 01:54

Good.

L Lis Malone 01:56

Still getting the Canadian wildfire smoke down here. So coming down to the States. Yeah.

R Rob Mineault 02:03

Wow. I didn't think that that was still going on. You don't hear it in the news. But I guess the Titanic sub kind of overtook the Canadian wildfire smoke.

L Lis Malone 02:12

Yeah, tragedy, always trumps environment.

R Rob Mineault 02:18

Yeah, very true.

S Steve Barclay 02:21

Well, as much as you might be suffering with the smoke down there, I would point out that we are getting the forest fire fires up here. We're on fire. You might be coughing. We're on fire, Lis.

L Lis Malone 02:39

Now you know what? Listen, maybe you need to wake up those little men in the canoe.

R Ryan Fleury 02:49

I was gonna say something was too soon.

L Lis Malone 02:58

Oh, Lord,

R Rob Mineault 03:00

See where that went after the show. We covered how everybody's doing, everyone's doing ... good. So I don't know. Anything else to bring up? We're all back together again. I feel like it's been a few weeks.

R Ryan Fleury 03:21

I know. Lis was gone again.

L Lis Malone 03:25

I was in New York. New York.

R Rob Mineault 03:28

Yes. What are you doing there?

L Lis Malone 03:31

Um, I was attending a book conference, ThrillerFest.

R Rob Mineault 03:40

I'm going to Google that to make sure that's a real thing. Because I noticed whenever we asked Lis where she's been and what she was doing it, there's always it's always this pause. And then it's like really slow. I feel like she's just making this up as as she goes.

L Lis Malone 03:54

Yeah, no, I was really at ThrillerFest. It is the internet. It's run by the International Thriller Writers Association. The big conference where all of the writers agents, publishers all get together and you know, network and pitch their books and I get to see some of my clients.

R Rob Mineault 04:19

We know you guys all get drunk and do the Thriller dance.

L Lis Malone 04:24

There was a little drinking done. Dance, I don't know. What happens at ThrillerFest stays at ThrillerFest. Oh, of course.

R Rob Mineault 04:33

Well, that's that sounds like like a good time. How long were you there for?

L Lis Malone 04:42

Four days.

R Rob Mineault 04:43

Nobody cares. Okay, let's move on. See, I missed you. It's like I'm in Grade 2 and I'm pulling your hair because I like you.

L Lis Malone 04:56

Oh, Lord.

R Rob Mineault 04:58

Yeah, see? There you go. So, Ryan, Yeah, Rob? I want you to tell the fine folks at home, just what the heck we're doing today.

R Ryan Fleury 05:07

Well, today we have the CEO and Founder of the company Ayes joining us to shed some light on their application called OKO, which has been in the news recently. I'm looking forward to hearing how this app works, what it does, how it all started. So Michiel, welcome to the show.

M Michiel Janssen 05:25

Thank you very much for having me. Nice to meet you all as well.

R Rob Mineault 05:29

Yeah, we are excited to have you we've been talking about actually about your app for quite a while actually, since we first heard about it, so we're really excited to have you on. So maybe why don't we just start with just giving us a little bit of a brief overview.

M Michiel Janssen 05:44

I'm calling from New York, so I don't think Lis is too far because she was visiting New York quite recently. But originally, from Belgium. And we also started our company there. The reason why we got into developing, and just generally incorporating our company is due to the fact that we have a blind friend in Belgium named Kenny. And he was actually one of the main drivers into starting up our company and developing OKO, because he just generally learned ourselves what his challenges were navigating as a blind person in Belgium. But quite rapidly, we saw those similar, let's say challenges, being faced in throughout Europe, but just generally all over the world. And about now, two years ago, we started to develop that what is now the OKO app. And generally speaking, before talking a bit more about the overlap, I think, two years ago, again, we started to realize that a lot of cities had difficulties, when it comes down to accessibility at large. But for our case, specifically, we were very interested to what extent cities install what we call them APs - an Accessible Pedestrian signal. And unfortunately, to our knowledge, we were kind of surprised to see that there's like a couple of cities that only have these physical audible signals. So what we wanted to do is provide an alternative in the form factor of a mobile application. And that's, let's say, one of the main drivers why we started OKO. And OKO does basically is that we use the smartphone back camera, and artificial intelligence to visually interpret the pedestrian signal. So it's a bit similar to what, for example, the physical audible signal do that we do that to your smartphone. And how it basically works is that whenever you're at a certain intersection, you can open up the application, you can put your phone against the chest, which is the best way to to use the application, to one catch the light at the other side of the road. It's easy to hold it at chest level. And generally speaking, whenever a traffic light is in sight, we immediately inform you about the status of that pedestrian signal. Here in United States, which is a bit different than in Europe. Here in the United States, there's three types of statuses, let's say there's a walk signal, then there's the don't walk signal, and there's countdown status. And for all of these different statuses, we provide a different type of feedback. And we actually, like differentiate ourselves with three types of feedback. One of them is an audible cue. A second one is a vibration or a haptic cue. And thirdly, there's visual feedback. So we always try to provide any type of feedback to convey the physical status of that pedestrian signal to any type of feedback that the user wants. So a lot of people rely on audio, some rely on haptic alone. So it's basically a user setting. But it's important to notice that the feedback is generally quite intuitive, but it's similarly to what physical audible signal does. So for example, OKO detects a walk signal. Our app provides a fast beep and a fast vibration to indicate that OKO sees a walk signal. And for a walk, don't walk signal, there's a very slow beep and a very slow vibration. So that's generally the basic gist on on what the core value is of our OKO appliation. I think what the main value to a lot of people here in the United States is that we provide the the ability to just explore any city, whether you're here in New York, or just travel the nation, that you can just go anywhere, anytime, open up the OKO application, and interpret the pedestrian signal yourself without having to rely on any other infrastructure, to your to your specific needs. So that's one side. And on the other side, of course, artificial intelligence, and there's a lot of things going on with AI these days. But we have a pretty unique approach, in a sense that all the AI happens locally

on the smartphone, which is pretty cool. But in a sense, that means that there's no relying on Wi Fi or cellular connection. So in a sense, you can even use or go offline, which is also a great value, so that you can just rely on it, everywhere you go. The only thing that you need to have, of course, is a battery charged to a certain level. And I think in addition to providing the status of the walk, or doing walk signal, again, it's something that we've learned through talking to a lot of people because since day one, we've been co-creating the app with the community. And it's something that we still do with more of a focus these days here in the US. But what we have actually discovered is that in addition to providing the status of the lights, that we can also provide a better sense of orientation, and also help with not veering off into traffic. And I think to to go a bit more into detail in both of them. The first part being the orientation aspect. Imagine that you're at an intersection, that is signalized, it's very important to hold the phone at chest level, which is an ideal height to get to capture the light. But what we then say and advice to people is that, for example, your parallel street is on the right, that you start start rotating your upper body away from that parallel street and gradually move towards that parallel side. And the reason why is if you do that particular scanning, there will be a certain moment in time that the camera will catch up that light at the other side of the roads, and makes you also or provides you that certain orientation, where you should line up yourself. So that's one addition that some people might use it for. And the second one is imagine, again, you're at the intersection, the walk signal comes on, you feel and hear affairs beep, a lot of people continue to hold their phone at chest level, say that is the moment that you're veering off into traffic left or right. There will be a moment in time that the camera won't any longer see the pedestrian signal. And that means that the feedback will stop, so you won't hear or feel anything. And at that bone point in time, there's a lot of people then that reorient themselves to find and catch the light again. So again, that orientation aspect, such that they can follow the sound or the vibration along crossing the roads to be able to, let's say straightly cross the street. And I think of course, it's always a good thing to remember - and we can't emphasize it enough - our technology, of course, is an extra tool in your toolbox. And it shouldn't be any replacement of good O&M skills. Orientation and mobility skills or a white cane or a guide dog, for example. It's just providing you more information on what's going on in the physical world to make a more considered decision whenever it's safe to go and cross streets. So that's more or less like the long and the short of the app and the background on t what we do here at Ayes. And we are an open application.

R Rob Mineault 14:41

Yeah, so that's really interesting. See, you said two things that are that are huge green flags. The fact that you guys have worked with the community to develop this, but also that you aren't looking to replace other you know, tried and true O&M skills and devices. There's so many apps out there that just, you know, that's exactly what they're trying to do. They're like, yeah, we are gonna replace the cane, we're gonna, you know, we're gonna make a smart cane that can do everything and cook you breakfast and is 60 pounds, and is $3,000. Everybody's gonna want this, or robotic guide dogs, we've heard it all. So it's really kind of refreshing to hear that, you know, this is something that's really just designed to provide an extra layer of information, and fill in those accessibility gaps that are out there. Because, yeah, you're absolutely right, especially in smaller cities not every crosswalk has an audible signal system. So I can see how this is gonna be incredibly useful to a lot of people.

M Michiel Janssen 15:57

Yeah, yeah, totally, totally makes sense. And I think to add to that, as well, I think, to give you and the audience a bit of background on before or how it was before, we actually focused on delivering software alone to the equip all the way in the beginning, we had the idea to also build some sort of wearable that was worn around the chest with some sort of like harness. But we quickly realized that current smartphones and very particular, current iPhones are such a strong device, when it comes down to the computational resources, the efficiency of battery, or just the camera that it has. And quite, quite quickly realized that it wouldn't make sense to build any AT device that's maybe $1000, $2000, $3000 bucks, whatever the the retail price would be. So we were more from the belief that we wanted to deliver it in a very natural fashion, which is just a mobile app that you can just download in the app store. And fun thing to note as well, it's a free app. So you can just download it in the app store. It's right now only in the US, so not yet in in Canada. So that was also our belief that if you want to really impact a lot of people, the only ways to do it with current AT devices that they already have. And of course, the iPhone is a great example, which you use for also many other tasks, or apps or just getting a phone call, for example. And a fun fact, actually in Belgium, the iPhone is actually a tool that is reimbursed from the government. So they already see the huge value in those types of devices. So that's, that's pretty cool to see those evolutions.

R Ryan Fleury 17:53

They say that it's currently only available in the US, is there a reason why it's restricted there?

M Michiel Janssen 17:58

Yeah, sure. Very good question. We started off with the OKO app in Belgium about a year and a half ago. And so the technology relies on artificial intelligence, which is generally interpreting based on an image that comes in whether there is first a pedestrian lot located in that image, and then defining what the status is, whether walk, don't walk, or countdown is on. So let's, let's say the basic understanding in order to have our service in a certain country, it requires a lot of data of country specific traffic lights. Because, for example, in Belgium, and I would say, generally, maybe just Europe, the traffic lights are generally the same. But compare it to the US, or Canada, the traffic lights are totally different. Here in the US and I think mostly also in Canada, you see a red hand to indicate the walk signal, and a white walking person to indicate the walk symbol. But in Europe, for example, it's a green man and a red man. So it's totally differen. There is also the technical barrier, which is collecting data, in a lot of cities across the US in a lot of weather conditions as well. Like if there's a traffic light that needs to be detected, whether the sun is there, whether it's night, or if it's raining, or if there's snow. So there's a lot of variety that needs to be captured in order for our system to learn from it. And that's one of the main drivers that say why we launch our app one country to another to really make sure that the technology is working as good as it is in any other country that we're live in already.

R Rob Mineault 19:52

I'm really curious to ask a little bit about the AI and the and how that is incorporated into the app.

M Michiel Janssen 19:59

Yeah, good. question. I think there's some parts more from a usability point of view that we've learned with the community, for example, like how to position the phone, do that certain sweep or continue to hold the phone when crossing the street. So that's all non AI related. And I would say more like, usability point of view or user experience. But I think the general feature, which is the recognition of pedestrian signals, that is, of course, all relying on artificial intelligence, and very specifically, it is computer vision. All computer vision does is, for example, if you're sighted, you can interpret the pedestrian signal you've learned through, for example, your childhood or just your whole life, what a certain pedestrian traffic light looks like. So you have a general understanding in your brain, what that is and how it looks like. And it's basically what the computer vision, or what we call deep learning, actually tries to mimic as well. It's like how the brain functions, but then try to translate it and let it be learned by a computer. And in order to let a computer learn what in our scenario, of course, a pedestrian signal is, it requires a fast amount of data, which I could touch upon in a variety amount of scenarios, different cities or different weather scenarios. And to be honest, I think, in our scenario, we have millions of pictures of pedestrian signals, whether it's in the US or in Belgium, that needed to be gathered before launch of the OKO app. But I think the beautiful thing about AI as well. and of course, also our product, is that it's also a self learning, and self maintaining algorithm. Let's say, in the sense that if you're at an intersection, and you use our technology to scan for a pedestrian signal, and you happen to get one, taking the example of a walk signal, and you detected that, what you can do, and that's a privacy setting, within the app, if you agree, you can share an image to our service. And all it does is that we can gather images of all people using our technology all across the nation. And in a sense, you're contributing with contributing your image, you contribute to making a better application for yourself, people living in that same city, or just generally people here across the US, which is great. So that's the let's say the main driver is really getting that data. Our in house model that processes all these data points, and learns from it as we go. So really, it's it sounds like just the fact that it's out there in the wild and the people are using it, that's automatically like making the app better day by day. Yeah, that's totally true. And that's why also a lot of people agree by sending over these data points. And things aside, of course, they're all anonymized. So there's no way to link a certain image to a certain user. So that's taken care of. But in a sense, a lot of people do want to agree, because they just generally get a better, better experience after all.

R Rob Mineault 23:31

So you also mentioned the fact that it can kind of keep you going straight if you're if you're, once you're walking across the street. Is AI driving that, like how does it determine whether or not you're either within the bounds of say, a crosswalk, or you're just crossing the street that say doesn't have a crosswalk, but it does have a light?

M Michiel Janssen 23:53

So the technology in general works with line of sight. So what we mean by that is that, within the imagery that the camera takes in, there needs to be a pedestrian light in that, let's say frame. If there's no pedestrian lights, the app will be silent. If there's a pedestrian light, you'll get that information through the audible or vibration cues, or even visual cues. And the moment that you're, for example, the walk signal comes on we initiate your crossing, the moment that you're about to veer off, there will be a moment in time that visually, the

pedestrian light will get out of that certain frame that is processed by our AI. And that moment you will notice that the feedback automatically stops. So a lot of people, we say that there's some sort of like spatial corridor that we generate. And if you go out of that spatial corridor, you know that you're veering off and you should reorient yourself, using your upper bodies and the iPhone to try to find and locate the additional light again. And of course, given that we're or that's that's basically how it works right now, given that we're still a startup and things are moving along, we've been receiving a lot of feedback on how to, for example, provide more granularity. To mean for example, if you're steering off , or you're veering off such that you can get an even a better understanding on how you're walking in the physical world, as opposed to right now, it's just following the sound. And if that sounds, helps, you know that you're not going in the right direction. So it's a thing of continuity to always improve the app. And that's also why we value talking to individuals, to talking to orientation mobility specialist, any certain individual or organization that are serving blind and low vision is particularly interesting to us, because that's how the product will become even better by implementing their feedback.

R Rob Mineault 26:10

So can you speak a little bit to how important it was when you were developing the app to sort of make it lightweight and sort of make it friendly for people who are going to be using it when they're out and about, and they might not have both hands? They might be, you know, in the middle of a crowd or traffic? Like how much did that sort of factor into the development of some of the features in it?

M Michiel Janssen 26:37

So that's a good question. I think what we learned throughout as well, because from the, let's say, the start, we, we always imagined that people would have like one hand free. But of course, that's that's not always the case. So try that journey, we, we actually learned that there's quite some simple solutions to that, for example, lanyards, or any, let's say solution that enables you to let the let the phone hang loose around your neck, or even around your wrist. And in a sense, what a lot of people use it for is that the app is opening the background for us or an opening the background, the app is open while just walking through a certain city. And that enables to also from one block to another to get the status of that signal when approaching the certain signalized intersections. So you already have a better understanding of what's going on, even before you're at the curb, for example. So that's, that's one way to you do it. But if you just want to open it at a certain intersection, people also use their their lanyards in parallel with, for example, Siri to say, hey, Siri, open or close. And that's the beautiful thing about it. Of course, whenever you're, whenever you're in the application, it automatically starts looking for pedestrian signals. So there's no other action required, besides opening the application. So yeah, that's, that's, let's say, for ease of use and ease of conference how I would say a lot of people actually use our technologies, if you don't have a free hand.

R Rob Mineault 28:27

So how long did the the app take to develop?

M Michiel Janssen 28:32

Also a great question. Yeah, we started off in July 2021. And then I did, it took about three, four months-ish, whenever we had like the first beta. But then we went through a very extensive and intensive beta testing program, which had like, I think it was a little over 100 people that were blind, mostly were centered in Belgium, in the Netherlands, because we just spoke the language, which was easier to iterate fast on on how things were moving along. So I would say all in all, it took us half year before we actually launched it in the app store in Belgium. And from there on, we've been continuously updating, yep, I think every other few weeks to three weeks ish. There's an update, whether it's something in the user experience that changes or there's a major update in the algorithms that we're using. So we're always trying to get the updates implemented as quickly as possible, and try to react to that feedback.

L Lis Malone 29:47

Michiel, are there any limitations that you that you guys have uncovered with the app? I'm just sort of thinking of my own experience like at a at some of the intersection and whether there are any limitations in terms of the distance, because sometimes you'll have intersections, which are literally six lanes thick, and they'll have like an island. And it's sort of expected that, you know, people who can see all the way across can stop at the island, like, you know, in between traffic and or light glare situations, because sometimes even fully sighted people have difficulty seeing the signals during certain times of the day because of the way the shadows cast and, and the it almost seems completely non existent in terms of what the signals are saying.

M Michiel Janssen 30:39

Yeah, that there are actually two great questions, although there's a third thing that I also found interesting, which I haven't talked about. But I think generally speaking, we have been ourselves, of course, and our users have been using it quite extensively over the past three, four months. Tthe most that we have had great success with was, let's say, on average, eight or nine lanes. But again, it always comes down to getting data points on intersections that are even broader than eight or nine lanes. And getting that in the algorithm, making a new model out of it, and then deploying to all users. So that's a thing that was also improving not only in terms of the accuracy, but also on wider intersections, that our app is also continuing to improve on broader intersection. So I would say right now, it's like an average of eight of nine. And I think something you mentioned as well, middle islands, that's actually also an interesting one. Because some people might think like what's going on if there's like, one pedestrian signal, so one crossing, there's a middle Island, and then there's another light to cross the second part of the street. That's also something that is built into our API, let's say, to the extent that we only provide information about the first pedestrian signal that you're about to cross and whenever you near the middle islands, it will catch up the next one, and provide you the information about the second one. And I think that's also a pretty interesting value proposition because to my knowledge, of course, being here in New York, if you have an an audible of physical audible pedestrian signal with a with a middle Island, you first need to push a button to go to the to the middle islands, and then you need to find the push button on the middle island to get the status of the the following crosswalk. So what it also enables a lot of people is to have some sort of like continuation using our products as you're going for the first one, you're nearing that middle Island, you immediately get feedback of the second light without going to

search for it. And so that's also something great that we've also discovered talking to people. And I think the second major question was, how's it working, for example, with some light hitting the pedestrian signal? I think we always make the analogy - and I'm sighted myself, by the way, I maybe I should have mentioned that in the beginning. But generally speaking, we always make the analogy if a sighted person interprets whether the walk signal or don't walk signal is on our system, using the camera can also do the similar job. But truth to be told, because I was traveling in Florida, and being the Sunshine State, of course, there was a lot of sun hitting some of those pedestrian signals. And personally, I wasn't able to see the pedestrian signal. But our OKO app was still able to do that. So it also being an engineer, it was it also amazed how well it was even functioning, as opposed to myself not be able to see the light at the other side of the road. So that was pretty cool to see. And I actually had a similar occasion the other day here in New York, where it was hard for me to argue which was which, but the app was still able to catch it in a good fashion. So that's that's pretty cool.

L Lis Malone 34:42

So if it isn't sure, I don't know if it if that ever happens, but it never guesses? If can't really pick it up, it doesn't give you any signal at all, correct?

M Michiel Janssen 34:54

No. Yeah, yeah, that's correct. Yeah. If it's not sure it won't, it will just basically be silent. And it's also there's some there's quite some safety mechanisms implemented into our application. Because generally, and that's maybe a bit linked to the story related to AI. For example, if one image and you analyze what the status is of that pedestrian signal, for example, what we just don't automatically convey the information based out of one frame, we do some sort of like majority voting on multiple frames and some other things that we internally do to really make sure and then we broadcast, whether the status is a walk signal, or don't walk signal. It never guesses.

R Rob Mineault 35:50

See it's better than us.

L Lis Malone 35:58

You know, what, what bugs me out about some of the AI technology and not I'm not saying for, in this case with with OKO, but if with just some of the platforms that are out there, that if their AI technology doesn't know what it's doing, it just tries to do it anyway. Like sometimes, like with the art, you ask it to create me a, you know, a woman holding a bow and arrow and she's wearing a blue shirt or whatever. And then you end up getting like this arm, it's like not even it's not even proportioned or it's like contorted or something like that. And it just like guesses, and just like, Oh, I'm gonna force an answer anyway.

M Michiel Janssen 36:36

So that's, that's certainly true. And that's where why we put like, another extra layer, which is non AI, on top of that AI too, of course. In all honesty, there's AI generally always produces a certain outputs. And we internally have our, basically another algorithm and on top of that, to your filter, or do some other things on top of that, and then provide that output to the user, if that makes sense.

R Rob Mineault 37:09

Right. So how has the response been from the community?

M Michiel Janssen 37:14

The response has been great. I think in the last three months that we've been live here in the US, we have crossed almost or a little over 200,000 intersections, which is a vast amount. And I think we we also see, of course, in an anonymized way, where certain people are using it in certain regions, I think we're in 48 states already. Of course, the majority of our usage, it's more like on the east and west coast or around those two areas. But a lot of people think about our technology being a game changer, because they can now have more freely explored places where before, they wouldn't feel confident because there was no physical audible signal. And unfortunately, there's also a lot of people that were struck by a car accident, for example, in the past, and didn't feel confident anymore, or went outside with a with a friend or a relative. And now with our OKO application, they they feel such such an increase in confidence in safety, to be able to just go out there again on their own. So yeah, the positive either the response has been tremendously great. And that also pushes a company like us into making that product even better over time. So yeah, it's really been really motivating.

R Rob Mineault 38:50

Yeah. So do you guys have a roadmap? Do you guys kind of have a plan in terms of rolling this out in some other countries? Or are you kind of focused on where you're at now to really lock it down?

M Michiel Janssen 39:06

Yeah, I think there's definitely a certain roadmap that our team has in mind. But we do want to leave it open. As I mentioned, it's been a co-creation, it still is. So we, we have some ideas on like, what might be interesting to bring to OKO. But we also always try to validate those thoughts, let's say or features before actually trying to implement it, because that would be probably one of the stupid things to do, being engineers and trying to build a solution for a problem that isn't there. So yeah, definitely, there's a lot of cool stuff that might be coming down to the OKO application. Thinking for example, about like more information about the intersection is a great topic that we've been talking about to lots of users. Like getting more granular information about the intersection. Like, is it a stop sign intersection versus a signalized intersection? How many lanes is the street that I'm crossing? Or which street and I crossing based on GPS? Or is there a middle island? I mean, there's so many things that can be

still informed, related to the intersection. And that's basically our core focus right now, because we assist on the intersection level. But also, maybe, for example, recognition of the crosswalk, if there's no line, that you have a better sense on where to cross the street. Or maybe even providing more granular information when you're veering off that people get a certain cue, like you should, you should move a little bit more to the left or a little bit more to the right. So there's a lot of cool things in our minds and in the minds of our users. So it's a matter of fact, just trying to find some sort of like common ground to let our evolve into. So yeah, I think, definitely, there's always people should always keep in mind our newest updates is one of the recent updates that we pushed, I think it's almost a month now. We've added dispersed GPS capability. And all it does is, imagine if you went to a certain intersection where you used OKO to interpret the line whenever you've crossed it occurred now stores that specific location with the fact that you've used OKO on that specific location. And whenever you're for example, mirroring that same same intersection throughout the day we will trigger you and mentioned like, hey, in 15 to 30 feet, there is that intersection where you use OKO before. You can open up the app to get assistance on conveying the information of the light. So that is more sort of like in a direction that we're going in like trying to improve both on the AIs, but also on my non AI related things like GPS.

R Ryan Fleury 42:21

Yeah, I have one more question. And I don't think it's available yet. But it's part of your roadmap to bring it to Android at some point?

M Michiel Janssen 42:36

That's also a very good question that pops up very often. There's some reasons to why we're not yet focused on Android. One of the most one of them being of course, that we're still a small team. We're a team of four. So our resources and times is also a bit limited. And there's the fact that iOS with the iPhone has been, let's say, the dominant factor in accessibility and that also resulted into the fact that I'd say the majority in terms of percentages in the market is on iOS, which was made sense for us to go there. But I think one of the biggest reasons why we're not yet on Android is moreso due to a technical barrier. As I mentioned, OKO runs locally on the phone. And given that OKO requires a lot of computational resources to calculate the artificial intelligence that we do. It requires a lot of computational power. And unfortunately, Apple has been pushing the boundaries there yet again, to make sure or basically to enable developers like us to process these complex algorithms locally on the phone. Because it's something that I haven't mentioned yet, but we do support an iPhone 8, or newer. Surprisingly, although it's like six, almost seven years old device, it's sometimes even better than, let's say, a new mid entry Android phone that you should buy or would buy these days. So the problem is that, of course, iPhone, being Apple, it's like one vendor. But with Android, you have so many vendors, there's maybe hundreds, if not 1000s of devices, that you suddenly need to maintain to make sure that the experience that we're now getting it's true, the same on any any other platform on Android, which makes it exponentially way harder to deliver that value as well. So, of course, there's definitely a willing to go there. But it's more like a technical barrier that keeps us from going there right away.

R Ryan Fleury 44:52

Well, I think you'd have to limit just like your iOS version, you know, iPhone eight and higher, you'd have to limit it to like Pixel phones or flagship models of Android, right?

M **Michiel Janssen** 45:02

Yeah, indeed, yeah, I think to be to be honest, I'm not 100% sure, but I think my hypothesis would be that the OKO app would be definitely running a good fashion on like the Google Pixel or the Samsung S series. And the reason why a lot of people are are on Androids is that it's more affordable. So it's already a smaller percentage that are on Android. And within that smaller percentage, maybe a very small percentage is on the higher end. So it's interesting trade off. And in all honesty, comparing, for example, US with Belgium, in Belgium, you mostly see that the mid entry that I've seen here in the US a lot of people that are more even towards that higher end phone. So it maybe makes more sense for OKO to be on Android here in US, as opposed to in Belgium.

R **Ryan Fleury** 46:09

Yeah, I have to ask the question, because I know there are Android blind folks out there that are asking if if it's going to come. And it totally makes sense as to why it's not there yet.

M **Michiel Janssen** 46:20

Sure. I mean, it's a good question. It's a natural question. And for us, yeah, unfortunately, that's literally that technical barrier, which not a lot of other companies have, because they don't process that AI locally on the phone.

R **Ryan Fleury** 46:40

Another reason to buy an iPhone.

M **Michiel Janssen** 46:43

I mean, to be honest, here, even in New York, but it started in Belgium, that people would switch from Android to iPhone or buy a newer one. But I think only in the past two or three weeks here I've been seeing a lot of people here physically in New York. And I think already two or three of them that I know that bought a new one, because they never seem to have some sort of like reason to do it. That now they had, because I literally showed them the difference. I think most of them were on an iPhone 8, versus my 14 Pro. So I handed over my phone, so they could experience like the difference in speed of the recognition. And also the ability to immediately get feedback when you're veering off. And that's why it's so important that the AI runs very fast. And you'll see that newer phones are way way more capable in doing so. So you need a lot of people or by maybe a lot that there is there are some people definitely that are buying new phones for for AI technology.

R Ryan Fleury 47:48

Have you guys thought about working with OpenScape? It's kind of the the the take off from Soundscape that Microsoft abandoned?

M Michiel Janssen 48:00

No. I do know that Sunscape release their source code?

R Ryan Fleury 48:07

They released their source code. Yep.

M Michiel Janssen 48:08

Yeah, indeed. OpenScape doesn't ring a bell to me.

R Ryan Fleury 48:16

OpenScape is out in the wild now. And people are using it as of like the last few weeks anyway, so maybe something to look at. Because I know a lot of people liked Soundscape.

M Michiel Janssen 48:30

Yeah, yeah, definitely. I mean, we've been hearing that as well. We don't have soundscape in Belgium. So actually, it was the first time like here being us that we were able to experience it.

R Rob Mineault 48:38

Well, Michiel, we want to thank you so much for coming on and talking to us about OKO. If people are in the US have an iPhone, and they want to download the app, how can they do that? And for those people who maybe don't, who just want to kind of keep up to date on what's going on, and when maybe it might be available to them? Where can they go to sort of find out more info and stay up to date?

M Michiel Janssen 49:24

Yeah, sure. So if you're hearing us with an iPhone, you can, in the App Store search bar, you can search for OKO. OKO AI Copilot for the Blind. That's the full name. And for those that don't have an iPhone or not in the US, for example, they can go to our website, which is www.ayes.ai.

And there you can of course find more information about the OKO web and the current developments. But there's also a chat where you can directly chat with us, or even subscribe for a newsletter to get the latest and greatest on the developments that are being done.

R Rob Mineault 50:18

Thanks again, best of luck with the app. And thank you for for really for building this this app that I think is is an amazingly impactful app for the community.

M Michiel Janssen 50:32

Yeah, thanks. Thanks for having me today. Have a great evening.

R Rob Mineault 50:37

You, too.

R Ryan Fleury 50:38

Thanks.

L Lis Malone 50:40

Bye, bye.

R Rob Mineault 50:41

It was such a cool app. Like that's such an amazing product that is lightweight and just incredibly useful.

L Lis Malone 50:50

Yeah, I can't wait. I really can't wait to try it. I just and the only reason why I haven't tried it yet, honestly, is because it's just it's just been so hot. And I really don't want to go else. Go outside and walk to the light and and sit there and just be miserable.

R Ryan Fleury 51:05

The next time you're out, though, when the weather's good if you do an audio recording of yourself walking away using the app. Oh, yeah, I'm gonna I guess we can use that on our website as well.

L Lis Malone 51:16

Yeah, no, I'm going to do some do some create some footage. I really want to connect with Bradley Blair on this, honestly. Yeah. Because I think Brad and I could have some fun and, and try it out and get some video.

R Rob Mineault 51:37

Yeah, totally. And it just, it kind of blows my mind that, you know, this is that previous to lead to this, there was just no solution. Like, if there was a big intersection, and there's no audio signal, you're just kind of screwed.

R Ryan Fleury 51:54

Got to listen to the traffic, that's what we're trained, right? And listen to the flow of the traffic and you're good to go.

L Lis Malone 52:02

Or using Be My Eyes.

R Ryan Fleury 52:05

Yeah, but we didn't have that, you know, 5, 10 years ago.

R Rob Mineault 52:10

But, man, so, so cool. And just so lightweight. And and you know, that I think the potential for so much more even is is really in there too. But I'm curious, you know, and, you know, we've we've talked about AI a lot. And I love that this is an example of AI, like the good part of AI because I get the feeling that previous to machine learning and AI, building something like this just wouldn't have been possible.

R Ryan Fleury 52:39

Probably not at the current development pace.

R Rob Mineault 52:46

Yeah, I think there's just too many variables, because, you know, they, it has to learn what, and it has to be rock solid, like what, what the walk signal is and what the don't walk signal is.

R Ryan Fleury 52:59

Well, that's why he said he's not just looking at one picture, right? That's the AI the machine learning.

R Rob Mineault 53:06

Exactly. It's able to look at 1000s of them and compare them and figure out and learn exactly what it is. So yeah, very cool. Just very cool stuff.

R Ryan Fleury 53:17

Sure. I wonder what the accuracy rate is.

R Rob Mineault 53:22

I don't know, man, I would think it would have to be 100, before they could really well, I don't know.

L Lis Malone 53:27

Well, it gave it gave me a lot of comfort that if it wasn't sure that it just didn't do anything. Because that's what like I said, that's what always freaks me out about AI is that it just is like, Okay, we're doing it this way. And I'm like, well, what is it? What if AI turns against us? It'll be like, okay, like, yeah, yeah, yeah. Go ahead, cross. Go ahead. Yeah.

R Rob Mineault 53:48

If AI goes rogue, we're all screwed. If AI turns against us, the crossing against the light is going to be the least of your problems. So don't worry, man. Very, very cool.

R Ryan Fleury 54:25

I just, you know, I can't wait for it to be released here in Canada or on Android.

L Lis Malone 54:32

In the meantime, I'll totally be represented. I'll be the guinea pig.

R Rob Mineault 54:37

Rob Mineault 54:57

But no, it totally makes sense why it's not. This is the downside of the Android platform and it being so open. For developers, sometimes it makes it 10 times as hard to develop something when there are so many other variables right.

R Ryan Fleury 54:55

You look at an iPhone and you've got some pretty standard hardware that is in an iPhone. Yeah. Look at Samsung, they've got 15 different models of Samsung phones. Yeah, exactly. Google Pixel has, you know, two or three different variations. LG has got their own. So yeah, it would just be a mess.

R Rob Mineault 55:14

Yeah, totally did it very hard to develop for sometimes. And especially when you're using sort of cutting edge technology like AI.

R Ryan Fleury 55:21

And that's why I said it would have to be like, flagship phones, right?

R Rob Mineault 55:27

Yeah, exactly. So, but who knows?

R Ryan Fleury 55:34

Well, he did say there'll be at the NFB and ACB shows in the next couple of weeks. So if you're in the US, and you're in those regions, head on over and say hell.

R Rob Mineault 55:42

Right. If you're a fan of thrillers, too bad, you already missed ThrillerFest. It was apparently last weekend. What's the next thing?

R Ryan Fleury 55:59

The next actual conference or the next time I'm not going to be on your show?

R Rob Mineault 56:05

Conference.

L Lis Malone 56:08
The next one is is called BoucherCon I'm not I'm not going because I'm going to be in Europe.

R Ryan Fleury 56:15
Oh, wow. When are you going to Europe?

L Lis Malone 56:17
I'll be in Europe for a few dates.

R Rob Mineault 56:23
Yes, she sounds so mysterious.

R Ryan Fleury 56:27
She never accepts a calendar invite. She never tells me if she's showing up for a show.

R Rob Mineault 56:33
I used to think she's like a traveling dominatrix but now I've been really knew she may be a spy. I don't even know.

R Ryan Fleury 56:41
Well, we know. She won't tell us about her boyfriend. Maybe he's a spy or something similar. Yeah maybe she's undercover.

R Rob Mineault 56:53
That's what I'm thinking.

L Lis Malone 56:54
I will not confirm or deny.

R Rob Mineault 56:57

Of course. Just like I'm going to be in Europe at a certain time. That's a during a certain period of time. Maybe. Maybe.

R Ryan Fleury 57:07

Might be here, might not be here.

L Lis Malone 57:10

Maybe it's not even Europe.

R Rob Mineault 57:12

Yeah, exactly. That's what I'm thinking. Maybe that's her cover.

L Lis Malone 57:19

See, I've been working with thriller authors for too long.

R Rob Mineault 57:26

All right. Well, let us know when you're going to have to book time off, you know?

L Lis Malone 57:33

Sure. I know. I'm afraid you're gonna dock my pay.

R Rob Mineault 57:44

Anyway. Hey, Steve, Steve, you there?

S Steve Barclay 57:51

Yeah, I'm here.

R Rob Mineault 57:51

Yeah, there you are. Okay. I thought you left.

S Steve Barclay 57:54

No, oh, no, here. Oh, sorry. I went I went down a rabbit holeI started Googling stuff and and then and then ended up finding my cousin in prison. So hey he's been in Louisiana all along.

R Rob Mineault 58:18

See, Lis, that's how you be upfront about stuff. All right, let's get out of here. Hey Ryan.

R Ryan Fleury 59:24

Yeah, Lis.

L Lis Malone 59:26

Yeah, Rob.

R Rob Mineault 59:34

Okay, hey, Lis.

L Lis Malone 59:36

Hey, Rob.

R Rob Mineault 59:38

Where are you going in Europe? You can just tell me, I won't tell anybody. All right, fine. Well, where can people find us?

L Lis Malone 59:51

They can find us www.atbanter.com

R Rob Mineault 59:54

Maybe

L Lis Malone 59:56

I will not confirm nor deny

R Rob Mineault 1:00:00
You can also drop us an email for sure at cowbell@atbanter.com

R Ryan Fleury 1:00:09
And they can find us on Instagram and Twitter and Mastodon and Facebook.

R Rob Mineault 1:00:17
And they can find Steve's cousin in the cafeteria lineup at the Louisiana prison.

S Steve Barclay 1:00:23
That's right. And I finally have his address after searching for it for years.

R Rob Mineault 1:00:29
All right. That is going to do it for us this week. Big thanks, of course to Michiel for joining us. And we will see everybody next week.