# Alan Chamberlain talks to Richard Ramchurn (Albino Mosquito)

0:01

So today we're going to be talking to Richard Ramchurn, one of the artists in residence on the TASS Hub project, And what we're going to be talking about is some really interesting work that Richard's involved in at the moment. It links to, interestingly enough, links to a couple of projects and a PhD project relating back to the trustworthy Autonomous Systems hub, and today, predominantly what Richard's going to be chatting about.

0:33

Is his speculative design or it's it's more of a I suppose in terms of this project it's more of a Co created speculative design.

0:44

Which makes it even more complex and much, much more interesting.

0:49

But what we're going to be looking at is the way that this work might fit into these well, the way that it does fit into the use case library, some of the issues that have arisen from this work.

1:02

Some issues that might arise in the future.

1:06

We're gonna be discussing things like trust. We're gonna be discussing how Richard's design highlights issues around trust and and the way that this might encourage and inform researchers when they look at issues to do with Al autonomy and trust. I I feel like I've said trust quite a lot there, Richard. So I'm going to I'm going to sort of ask you to introduce yourself.

1:32

So hi, my name is Richard Ramchurn. I'm a artist and researcher based at university in Nottingham and I've got my own company called Albino Mosquito Productions and I make interactive and adaptive.

1:49

Contents, story content, sometimes movies, sometimes VR. I've also got a personal artistic practise where I explore.

2:02

The latent space of.

2:06

Generative Adversarial Networks.

2:10

To try and explore it, what is? What's happening within these AI image creation and networks? So I've

been involved in, I'm involved in the attacks up to to create a piece of work responding to the idea of AI and trust and I'm collaborating with a pH. D student called Favour who's who's their own work is about.

2:41

Al avatars or avatars online and um um.

2:49

Identity.

2:52

So together our our main main idea is is to create create avatars that are in some way creative with Al.

3:03

And to really challenge the audience to explore what part of that?

3:11

What part of what they're looking at is created by what's created by humans. Not give them answer, not give them answers, but let people like.

3:20

Try and figure out for themselves or or see if they can. If that's something that's possible for people to figure out for themselves and it's it's relevant to think things that you see online like that, do you trust that that's a real person that you're talking to online?

3:39

And and as you, is that a real voice that you're hearing is that is that come come from somebody?

3:47

Who's actually talking?

3:50

A is Is the image actually created or is it?

3:56

Is it a philtre that somebody's got on?

4:00

Fundamentally, it's asking the asking you if you.

4:04

Believe or trust what? What you're what you're being shown what you're hearing is what is is there some is is the is the voice involved as part of the so.

4:15

Right. Where is it is in progress just now. So we're making this a series of like talking heads and and

some of the voices will be simulated. Some of them will be from the person they're seeing, some from that we're we're swapping voices.

4:35

We were using the I generated voices, but then the actual text that has been spoken, some of that is the I generated something that's written for the other person. So you're not exactly sure where the where the the message is coming from and then what the medium of that message is who's who's don't got the ownership of that or who who as a viewer who are you putting that onto so.

5:03

Well, imagine it's gonna be quite confusing.

5:06

Experience to to watch and I think that's part of it, is to try and.

5:11

Really put the UM to provocate the the audience to to to really explore what what is they're seeing and where that content is coming from. Like who is who is speaking?

5:26

So do you think this this stuff will be a good fit in a in a use case library then?

5:32

Yeah, yeah, I think it's.

5:34

It's something you could definitely.

5:36

You could explore in different ways. I mean, and it's and I was inspired by real, real applications of AI or virtual humans, digital twins, and like the kind of thing I always say uncanniness, but just like the plain weirdness of.

6:00

El Humans who are interacting with with people.

6:07

Umm.

6:09

Because what happens when you what happens when you can't tell the difference? Or if, yeah, you you don't have the capacity to tell that tell the difference or even you don't have the power to actually speak to a real person. So you have to speak to an Al and like what? What is? How does that make you feel as as a as a human being?

And and what is? What is that interaction? What does that mean if you are locked into like the constraints of a AI conversation?

6:44

Yeah, I mean I I I can immediately see like one of one of the obvious things with this sort of stuff is that I think we've discussed this before with Jennifer Williams at Southampton and it's that.

6:58

And and I think a couple of years ago, nobody didn't it, nobody paid much attention to me when we discussed it and said, yeah, what? What would happen if somebody could model your voice?

7:07

And then get data about you that was really mundane. They could. You're basically giving an intelligent person the licence to rob you.

7:17

It's it's already like.

7:21

Was it McAfee Securities And say it's when you're speaking to a loved one on a video call or on the phone? Have some challenge questions only they would know.

7:33

Like that's in their documentation of how you not get scammed by, um, voice and image spoofing. So it's that's and that's now so.

7:46

Do you do you think the real issue isn't it? Ohh, yeah. Do you think the stuff that you're working on now, I mean I I can see.

7:53

I mean, you'll have to tell me whether you feel this is the right right thing that I'm imagining or envisioning is I I've got this amazing use case library with all these different use cases in it. And I mean it might be of interest to you as an artist as well.

8:07

So I mean we we're looking through, we're looking through that and you're you're thinking about robotics and you want to look at for example, naturalistic interaction with with humanoid robots.

8:21

And people, could you could I then dip into the stuff that you're going to be adding to the collection and your speculative design which you're which effectively you're talking about now?

8:31

And then pull on some of that content around creating.

Intelligent, autonomous avatars and then map it onto a physical artefact somehow. Yeah, yeah, I I think, I think some of the interesting things will come of this work when it's when people start engaging with it and and how they what it brings up for them. So we we're talking about identity, we're talking about race, we're talking about gender.

9:02

A lot. A lot of these robots are, even if they're not.

9:07

They're not. I've never seen a robot that's deliberately designed with like some kind of ethnic backgrounds, apart from just being like a plain white robot.

9:20

Do you think that raises trust issues?

9:23

Well, I I definitely puts it in a.

9:27

A place, doesn't it? Yeah.

9:34

Makes it come from a certain place, doesn't it?

9:36

Yeah, yeah, yeah.

9:39

I was just. I'm just interested because I mean it's.

9:42

Do you think that you, I mean, we've discussed this and I mean, I know that I've discussed it with with favour certainly.

9:50

Do you think that?

9:51

It feels to me like one of the gaps that you might have identified in in terms of TAZ research or even responsible AI research is is one of how do you deal with issues?

10:08

Of of identity.

10:12

Yeah, I mean it's it's, it's there, it's like a layer throughout everything isn't it throughout our life. But it's

it's quite hard when in research to really highlight it cause it's always embedded in the researchers and the place where the research is being done.

10:30

We're we're looking at it guite.

10:33

We're we're looking at it, yeah. And and because we're we're making like a an artwork, we're physically going through the processes of engaging with the technology and making it where things are popping up and and the actual process of making it. For example, one of the techniques we're using is facial performance where you have a camera pointing at the face and there's an AI machine learning algorithm that will see where your eyes are, your nose, your mouth.

## 11:04

And it worked fine for me and so III was popping out.

#### 11.11

A meta human character and set it up for favour who's she's black and the the IT just didn't work. That's so so we're coming up against like racist technology and as things have been trained on a select few, a select ethnicity.

#### 11:34

And and just literally don't work for other people. So, so, like in the making of the work, we're coming across things that are relevant to identity, to ethnicity, yeah.

### 11:48

And and do you think that this is?

#### 11:51

You know, as I suppose, what what you what you were specially got is so so are is your.

## 11:59

So this is very practise based rather than coming up with a speculative design and not implementing you're you're actually, you've got the luxury I should say of implementing some of these things because of the fantastic resource that the VIP Lab that you're able to tap into.

#### 12:19

So so are the use cases that are coming off of this.

## 12:23

Actually, you know literally practical use cases. So your your bigger use case is to do with identity, creating avatars using AI autonomous techniques in order to do that. But what it seems to be surfacing are a range of issues.

#### 12:41

That you could then populate something like a use case library with.

To yeah, research is about, yeah, hold on it. But when you're gonna use this stuff, you know, do do you think about sort of issues, more responsible issues to do with diversity and inclusion but also.

13:01

Physically.

13:03

But but identity wise is. Is there something else that?

13:07

Are people raising issues?

13:09

Trust base issues when they when you when they can't use that care. Does does it give you a sort of second do you think? Ohh, hold on a minute.

13:18

Yeah. I mean, like The thing is there's so many different technologies out there that.

13:23

I and the the facial performance capture we use. It's expensive. It's really pricey.

13:31

And and it doesn't work for like half, half the world. And I actually didn't know that I I I wouldn't have put somebody through that. I was like really embarrassed And as somebody who had the equipment and was going right, let's do this, we'll make that work. Ohh, look, it doesn't.

13:47

So I mean, we had to use like our.

13:51

And your.

13:55

I could definitely a different method of like face capture, um, which is actually because it's like quite new and it's free. So it's like there are alternatives but I'm not going to be using that again with like.

14:11

If I can't help it.

14:12

And yeah.

14:15

I mean as as as the same as was not same but similar in in this idea of exploring.

1	Λ		2	2
п	$\neg$	٠	_	J

Image generation and the the kind of the.

14:27

Uh.

14:30

When you, when you.

#### 14:32

Create a prompt and and from that, like that language, the kind of stereotypes that are embedded into that language, into the training of the models, Yeah.

14:43

Can be.

#### 14:46

Negative can totally be negative and so so but as as something some as an artist or somebody that works with a I you get to know what the those biases are within certain models and you have to like kind of.

15:02

Build your prompts around them to to.

15:07

Uh.

15:09

Yeah, to to cause you know what's gonna come out if you just take take out echo.

15:15

A certain thing. So you have to work against these biases. And I mean that's that's like the experience of.

15:25

Half the population, yeah.

15:28

So have you, have you got any examples of the work that you've been doing? Yeah, yeah, yeah. And I'll share my screen. Yeah, tell us a bit more about it, because I'm really intrigued by this. I kind of love the idea that.

15:42

The these rather than coming up with one instance of trust where you know.

15:48 Robot comes up to Richard and says can I have your passport and you say no?
15:53 And know.
15:54 That they're there's kind of weeks and weeks worth of.
15:58 You trying to use these things and working with other people.
16:02 To to try and navigate and negotiate a way through all of these.
16:07 How?
16:08  Just give you a sneak peek at some of the things that we're playing with. Yeah, these aren't edited and so just I'll give you an idea.
16:20 What are the fines?
16:24 3.
16:25 Sir.
16:27 1.
16:30 Images of Trust.
16:32 Visual and engaging in tackling this my synthesised present.
16:37 Crafted from algorithms and the Testament to humanity's relentless focus of knowledge.
16:44 As my voice aligned with human life.

16:47 But that's what's contemplates the daily dance and trust and identity and representation.
16:54 And in this postmodern world, the boundaries of perception.
16:59 Urging us the question was, is delivering amenities uncertainty would provide a path towards trust evolution.
17:07 And Bruce, the future where boundaries result.
17:10 As we're keeping our hands on air.
17:14 Together, we navigate unchartered territory.
17:18 Fostering trust in the Union.
17:24 Trust.
17:27 So using like a different scripts created by AI or created by humans.
17:35 Umm.
17:37 We don't know who's, who's actually speaking and then we've been lip syncing to different performances. So I I would read a script and then favour with lip sync to that.
17:52 Um in using also different?
17:55 Future technologies.
17:58

So previously that was.

18:02 Face Capture performing now a messy human and Unreal Engine. These are not my words.
18:09 I am speaking. This is not my voice. This image is not me.
18:14 Altogether I am here to ask. Can you trust me?
18:19 As I write, I do not know who listens.
18:23 You, the listener, Are you human?
18:26 And should I trust you?
18:32 So this is a volumetric capture.
18:35 Which is?
18:37 Couches like a three-dimensional video and likewise with stuff that.
18:43 I've I don't. I don't think there's sound here.
18:50 Weather in.
18:53 So so trying to get these different visual.
18:58 Styles, but actual processes of capturing.

19:03 People and.

Where whereas it might be glitchy, you can tell, you can tell that that is a person came to the imperfections off the the medium feed in like that to realness of the the presence of a person.

Which is giving counterproductive to AEI being so perfect and the perfectness of of images even though they're not real and so our our next step is to is generating avatars of ourselves.

19:40

And and asking the AI to reimagine ourselves. So these two images using I think Bing.

19:50

Things AI generator and crayon and I think the the.

19:57

Prompt as a a Scottish Mauritian artist whose bald and wears glasses so I don't know if there's some noise that's me we're making our own avatars was like I'm interested in how close is is the I going to get to to me.

20:15

And and then I think these are the some of the closest ones. There's some really weird ones as well.

20:23

But yeah, and and you're using these images to to animate.

20:30

So.

20:31

Yeah.

20:34

So with with the work that you're that you're doing now, I mean.

20:38

It's it's kind of.

20:40

I I suppose it's.

20:44

How do you see this sort of work as?

20:48

Something that you know some people might look at it and think wow, you know Richard is doing all this stuff and I can see that there are it's they're much, much, much more than just simple use cases aren't there because it's.

It's it's almost examining kind of what it is to be human in terms of.

#### 21:07

You know, this this so-called technology can't really deal with identity based belief.

#### 21:14

Issues. There's just so much isn't there? It's like like the the AI tools are are.

#### 21:22

They're interfacing with us a a really high level that would really only be be used for how other humans would interface with each other, like creating a quite complicated artworks.

#### 21:36

That, yeah, they're based on a whole.

#### 21:40

Volume of fake previous human created work, but but there's there's there's meanings embedded in these energies.

#### 21:54

Intentionally or not?

## 21:56

Um, which? Which?

## 21:59

Can be used for can be used as like an artistic toolbar. It can also just have it blunt everyone's reception to art.

## 22:11

So there's like, there's a lot of kickback against Al being used as our.

#### 22:19

Not just within like Ohh, it's taken away artist jobs, which it is.

### 22:27

But also, but people, I think the initial came for excitement of of seeing this is wearing off as it's become put out in the public for is a free tool like the, the, the.

#### 22:43

Asthetic of it is has become really has been become old quick yeah.

## 22:50

And and so finding ways to to use it as a medium for communicating.

ls, is.

23:01

It's possible, but it's it's it needs a lot of thought personally.

23:05

Yeah. And and I also think that I mean you just.

23:08

You know, and if you just come up there that I've never thought about in terms of use cases is.

23:14

If if you're using an autonomous system that has and you want to create some sort of aesthetic.

23:21

I mean, but bearing in mind that like a huge amount of income is generated.

23:27

Through developing things that look nice.

23:30

Or look cool, or they look like brands. Then yeah, how on earth do you create use cases that would?

23:39

Kind of provoke or help people understand about that, those sorts of.

23:45

Uses of this sort of technology I I was going to ask you as well as.

23:50

As as somebody who's working on this stuff now, would you know if you've started this like, I don't know, a couple of years ago and you've had a big library of use case with examples like this would, Would you have found it useful?

24:04

Yeah, I mean, I I'm, I mean, the use cases can be read like Black Mirror episodes, don't they?

24:11

There, there. I mean, well, I mean imagine the word too. So it's always like.

24:18

You're arrested by a robot like do you? Do you comply?

Joe is. It's, it's.

24:24

And they're all like.

24:25

Interesting concepts at which each one you could run with and place a narrative on and explore in more ways than just yeah, I would I would comply or I wouldn't comply as an answer.

24:39

And I think I don't put in that campaign narrative or visualising it in a way that can be addresses emotion rather than the straight up Intellect is you. You get like a a richer response.

24:58

Yeah, so you're gonna be documenting some of this stuff now, aren't you? To put an entry into the into the use case library and.

25:09

So it it it would be, I mean if you if you were you are a researcher, but.

25:16

١.

25:17

I think one of the things that I'd be fascinated to see where that would be.

25:22

Yeah, the are are you heading towards the final installation piece with your work? Are you are you gonna practically do some of it and.

25:30

It would be nice to, it would be it's were built in.

25:36

The content that it could be put in a physical space that you could interact with I mean and there's like if you stretch goals off to make these responsive. I mentioned earlier that my a lot of my work is interactive and adaptive and.

25:56

And so making.

25:58

These like can be portraits alive and be what we follow you around the room or ask you questions.

Would be like about as some if we're to make it into a real installation, that's something that would really explore.

26:14

Yeah, I think it's something that would kind of explode.

26:17

Not not in a physical way, but certainly in a sort of diagrammatic way.

26:22

If you've got all these different ideas of trust and you and you've got adaptiveness.

26:28

And you've got avatars and you've got real Unreal generated.

26:34

You know, historical, different sorts of media, this sorts of content. It almost lends itself to a library of use cases in itself. There's lots of facets to.

26:46

And I think that's something that can be burned off from creating artwork as a.

26:52

As a research tool is is all these like this multifaceted ideas that people can bounce off respond to?

27:03

And so some.

27:06

Turn people off. Sometimes they can be scared by it because it's like it's not.

27:12

You don't understand is it's about responding to it. It's about reacting to an almost like an emotional way because it's about exploring how you feel about it.

27:27

Rather than just asking us a simple question, yeah, but I I would say I mean as I know that some people might not be comfortable with using their creative approach or even some people with a practise based approach to.

27:39

Um.

27:40

Unpacking trustworthiness.

Um.

## 27:44

But it's pretty serious stuff you're doing really, isn't it? If you, if you think about it, I mean it's it's kind of, you know, certainly raising a huge amount of issues that researchers should be aware in, aware, aware in, aware of.

## 28:00

So I'm going to wrap up there, Richard, because it's been fascinating to talk to you and we'll put some links at the end of the video to your previous work and also.

## 28:15

We'll put some some sort of links to content in there as well for you. So thanks very much. Thank you very much. Cheers, Alan.