С	Н	Α	Ν	G	-1	Ν	G
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U	Ν	D	Е	R			
			S	Т	Α	Ν	D
Р	Е	0	Р	L	Е		

# Behaviour AI: Changing the Human-Machine Interaction

Presented by: Kim Vigilia kim@humanisingautonomy.com





A shift back to people.



Our daily lives are now crammed with automation, but it don't mean these machines understand our behaviours, actions and intents.



We teach machines to understand people in order to create safer, more efficient, and more pleasant human-machine interactions.





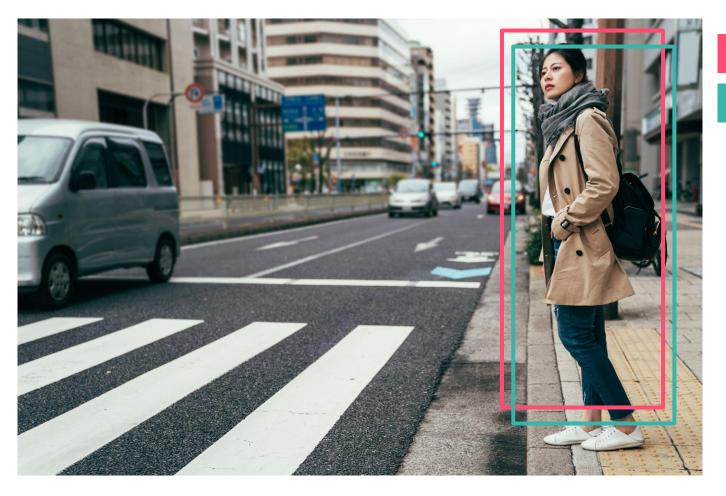
Our ethical computer-vision software understands and predicts human behaviour to quickly, safely, and accurately provide the context between people and machines.

# **Behaviour Al**

/bɪˈheɪvjə/eɪˈʌɪ/

An AI system that directly interacts with humans or needs to understand human behaviour for further decision making





#### At Risk Pedestrian

**Safe Pedestrian** 



#### Are they at risk?

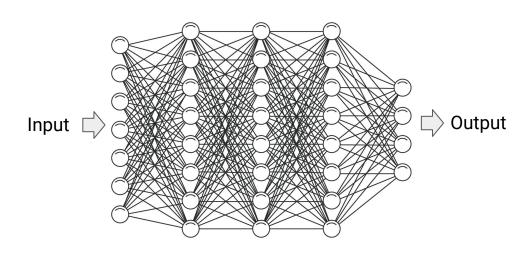
- Intending to cross?
- Looking at a sign?
- Relaxed state?
- Preparing to run?



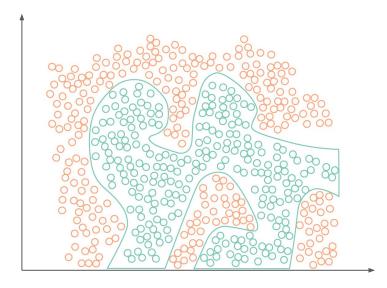


Behaviour-based artificial intelligence can change how automated technology responds to people.

# Deep Learning and Behaviour Al



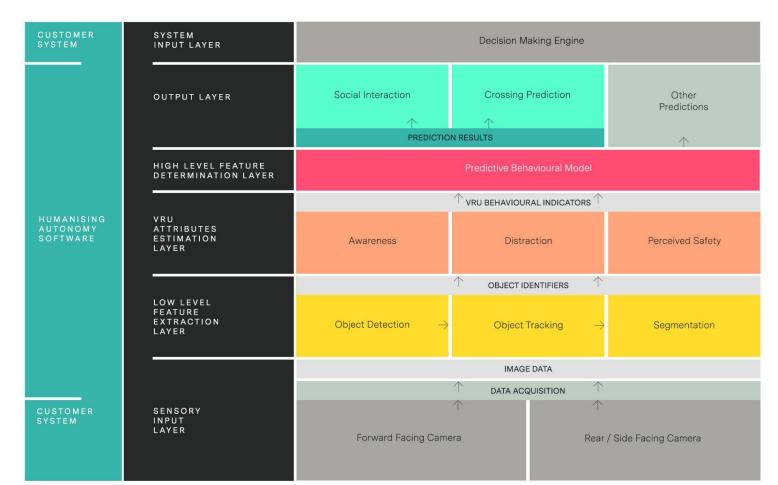
Fully connected deep neural network



Non-linearities allow us to approximate arbitrarily complex functions

(Ref: Anjali Kumari) HUMANISI

### **Behaviour AI architecture**





Ethical.
Safe.
Human-centric.

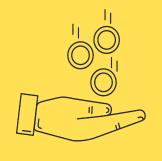


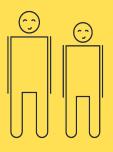


- No facial recognition
- No identity capture
- GDPR compliance











Safety and reduced liability

Cost savings and efficiency

Enhanced human experience

Competitive edge in growing markets



# **Customers and partners include**

























Infrastructure market leader Metaverse market leader Smart home market leader



# Nvidia, Ambarella, Qualcomm Chipsets Supported

Cost / Power							
Low	Medium	High					
QC Snapdragon 4/5/6xx	QC Snapdragon 888	Ambarella CV2					
QC QCS610	Ambarella CV22	Nvidia Jetson AGX					
Ambarella CV28	Nvidia Jetson NX	Nvidia GeForce					
Nvidia Jetson Nano		Nvidia Tesla					

- Number of cameras
- Feature Richness (more detailed analysis of each road user)
- Accuracy
- Performance (eg. FPS)



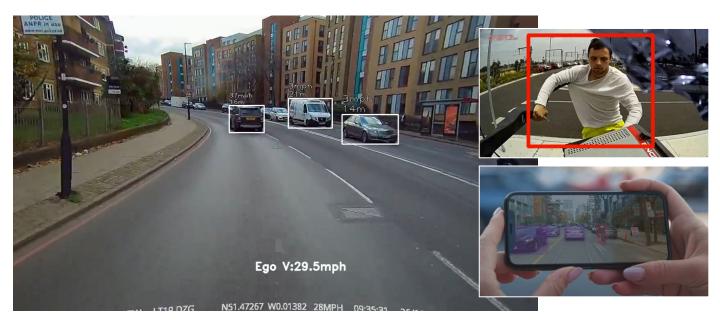








# **Dash Cam Case Study: Nextbase**



Humanising Autonomy's Behaviour AI platform will be deployed on Nextbase's next generation of smart dashcams, Nextbase IQ, to provide detection, distance estimation, and velocity estimation of vulnerable road users and vehicles, to inform Forward Collision Warning and Parking Mode Alerts.

#### **Customer:**





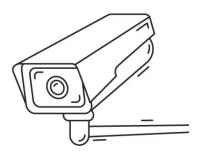
Behaviour-based artificial intelligence

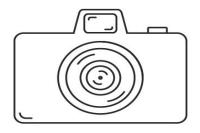
Ethical computer vision software

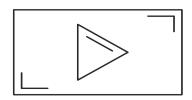
Better informed, relevant decisions

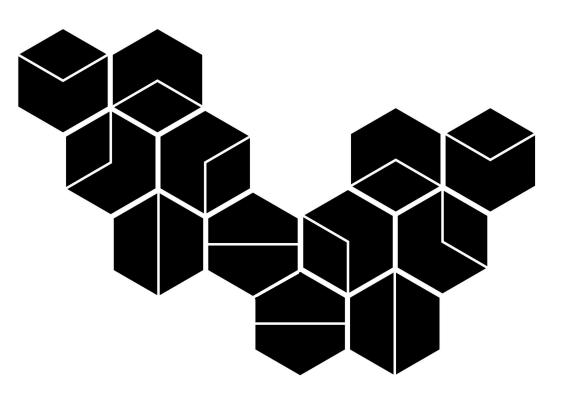


All we need is to connect to your existing camera, platform or access your video footage.









Easy to integrate, access or use so that scaling is fast and accessible.



# Ambitious, diverse and world leading team



Diversity, inclusivity and equity

Representing more than 15 countries, our team comprises 50+ of the brightest minds and various PhD's across business, behavioural psychology, data science, deep learning, engineering, product development and strategy.

We value and celebrate diversity of backgrounds, opinions, methodologies, experiences, skills, qualities and contributions.

#### Backgrounds and expertise from:



























С	Н	Α	Ν	G	I	Ν	G
					Н	0	W
М	Α	С	Н	1	Ν	Е	S
U	Ν	D	Е	R			
			S	Т	Α	Ν	D
Р	Е	0	Р	L	Е		

# **THANK YOU!**

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