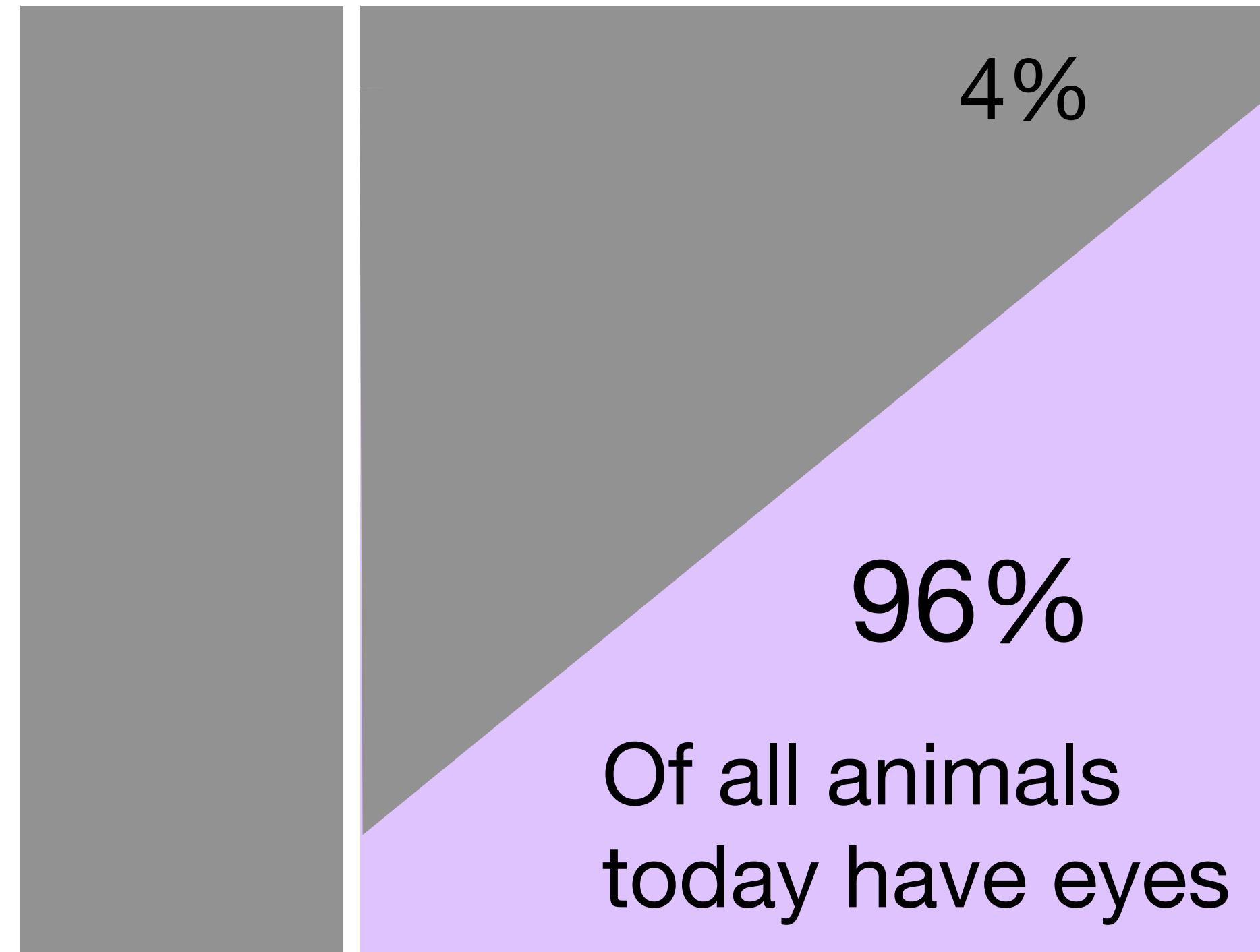


Ai Vision

Bringing the power of generative and discriminative Ai to the real world

Vision is the dominant sensor



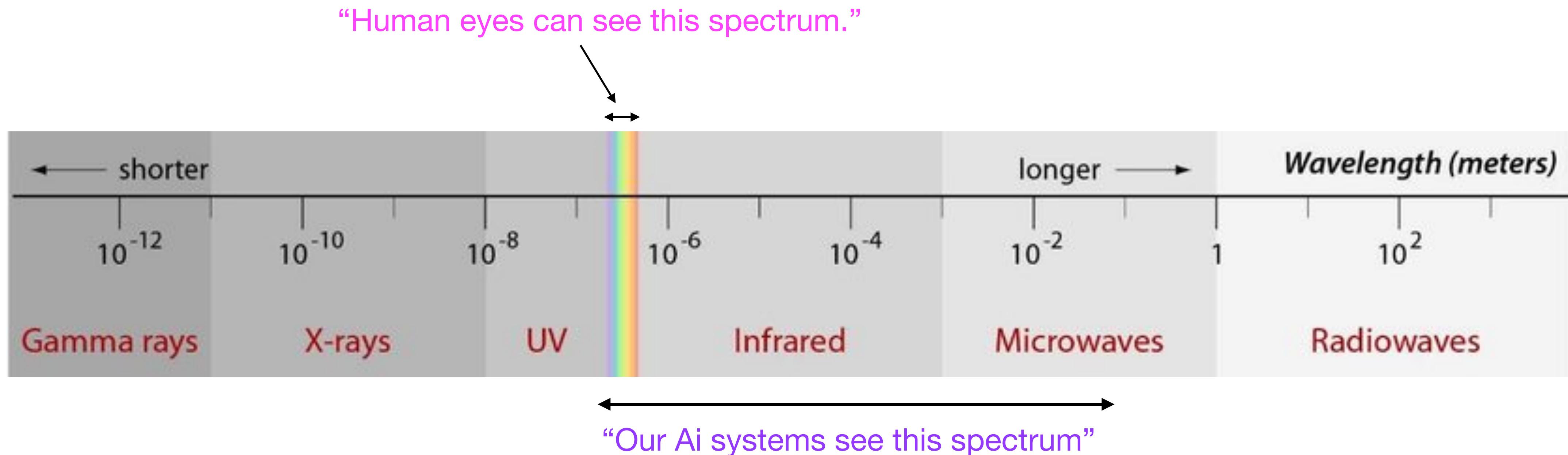
With the evolution of eyes, Cambrian explosion of species took place

One human brain has

- 86 Billion Neurons (nodes)
- 100 Trillion connections (parameters)
- 1 Trillion token length (rods/cones, sensitivity)

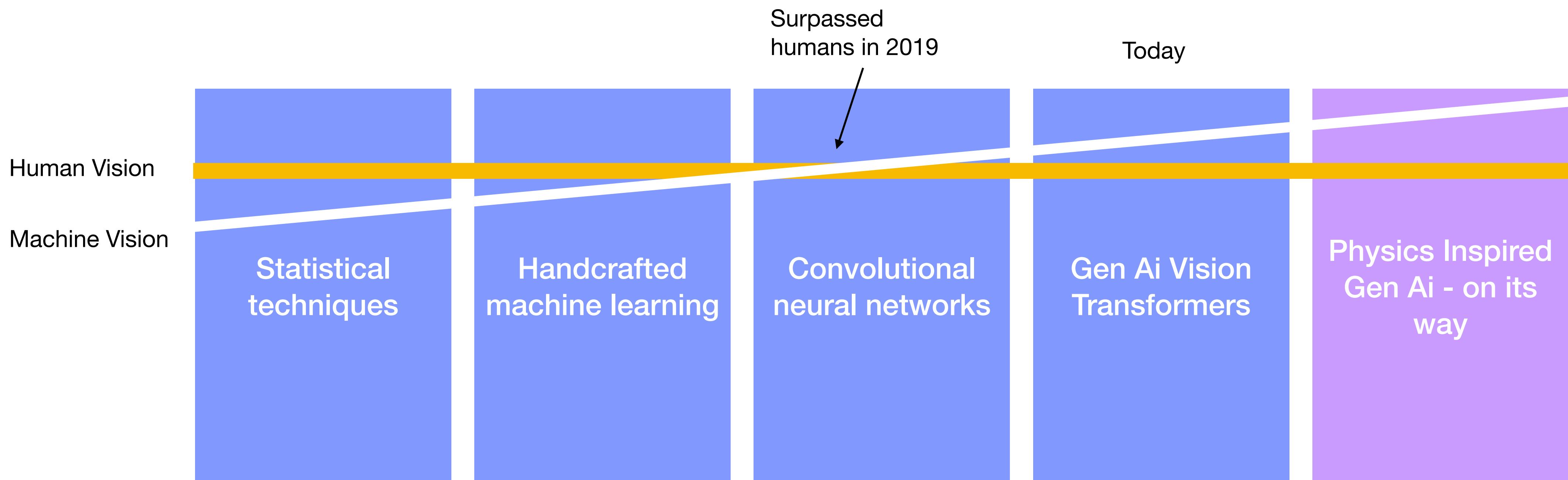
50% of our brain power is devoted to vision

Narrow spectrum, yet dominant



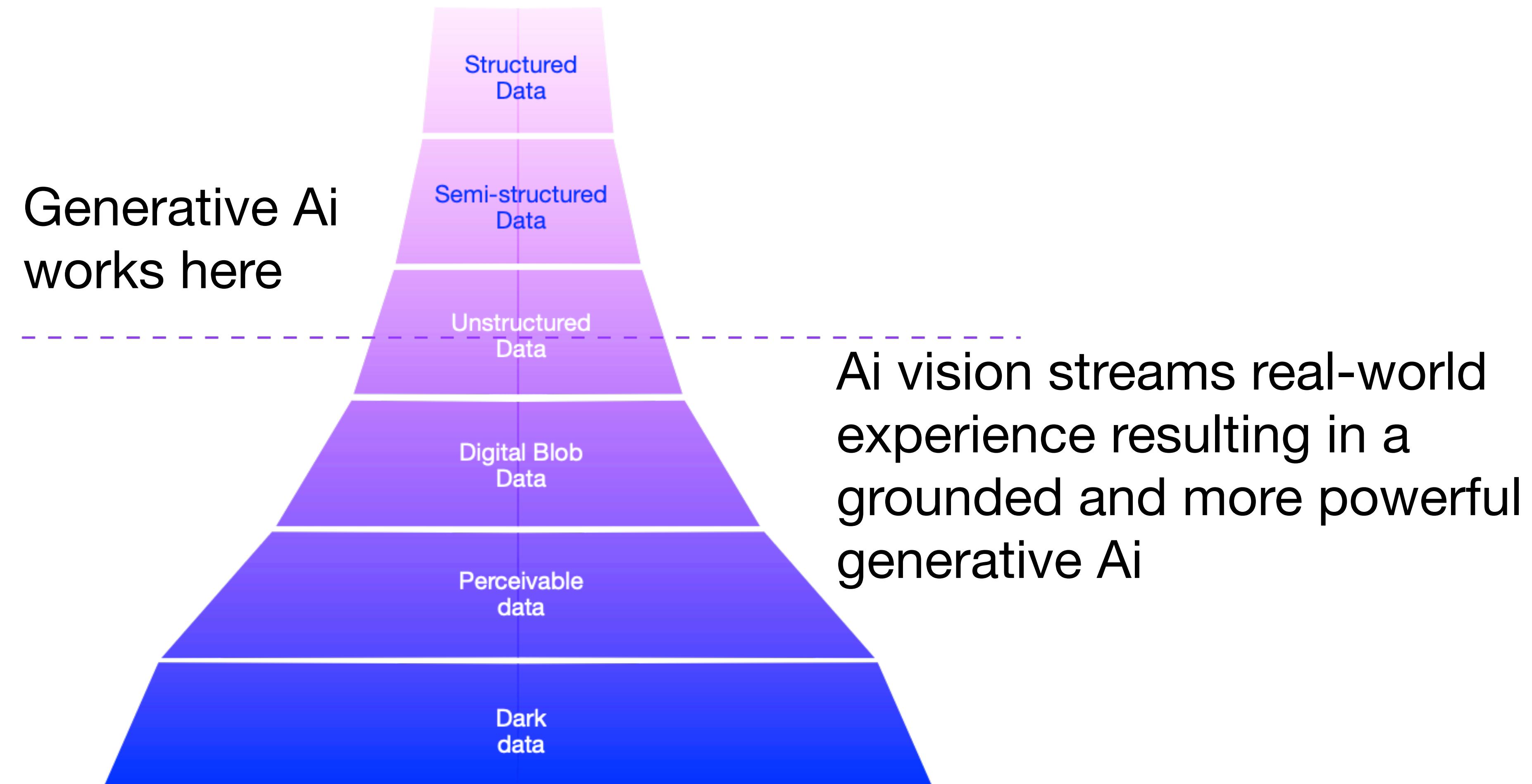
Ai vision trajectory

How accuracy of vision processing has improved over technology eras



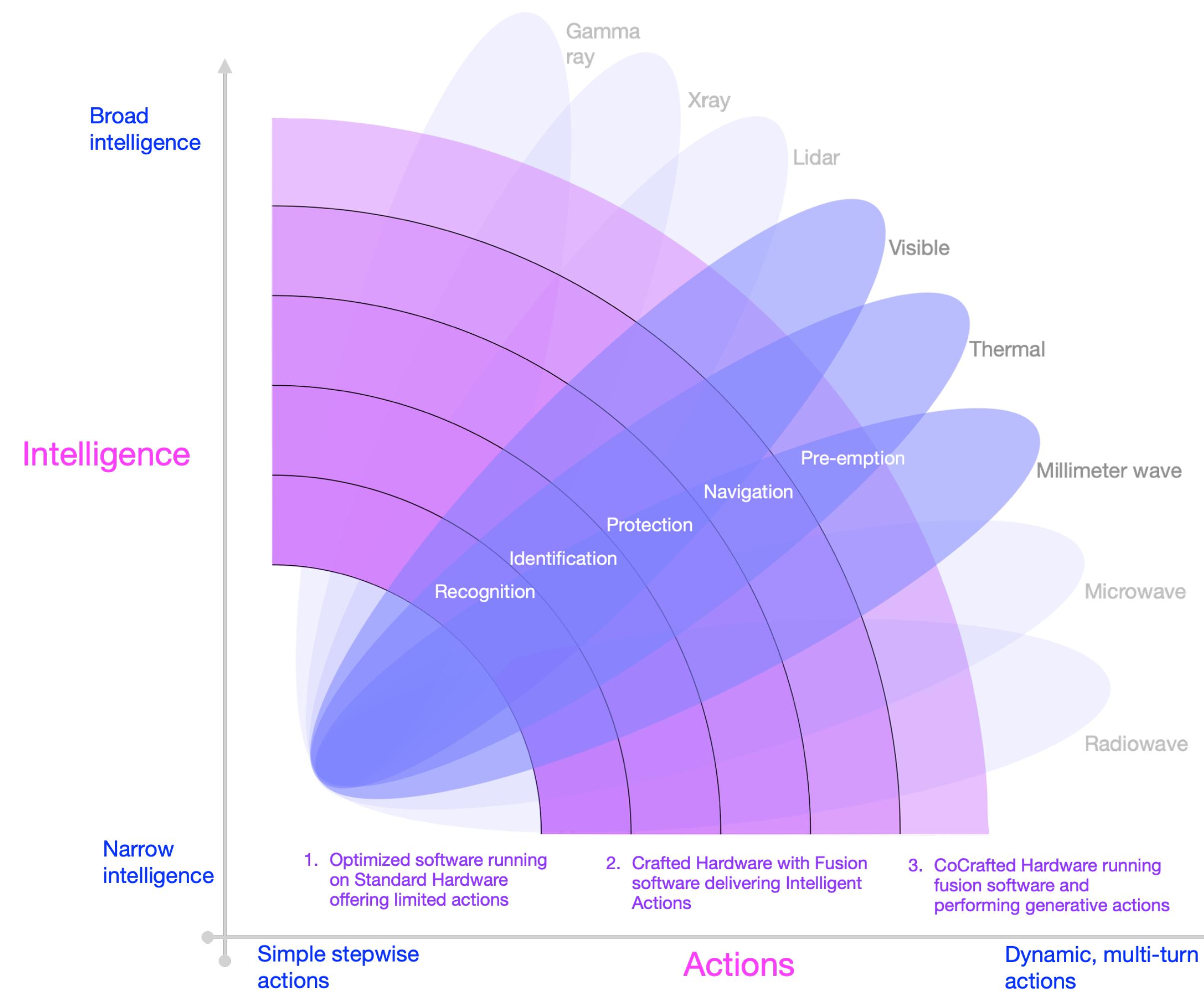
Making invisible, visible

Feeding the GenAi beast with ground information



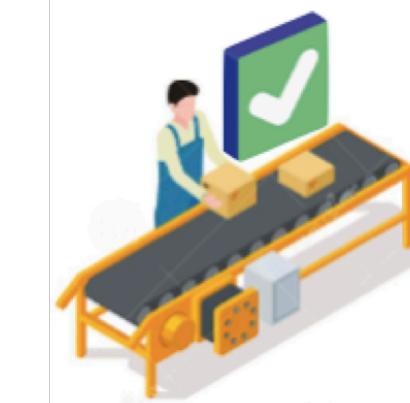
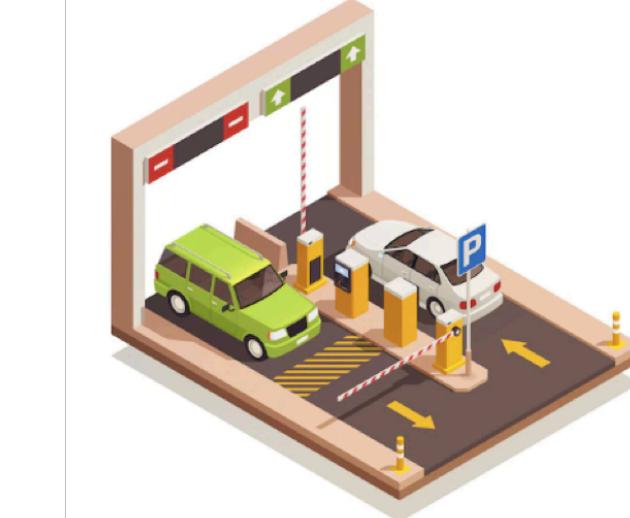
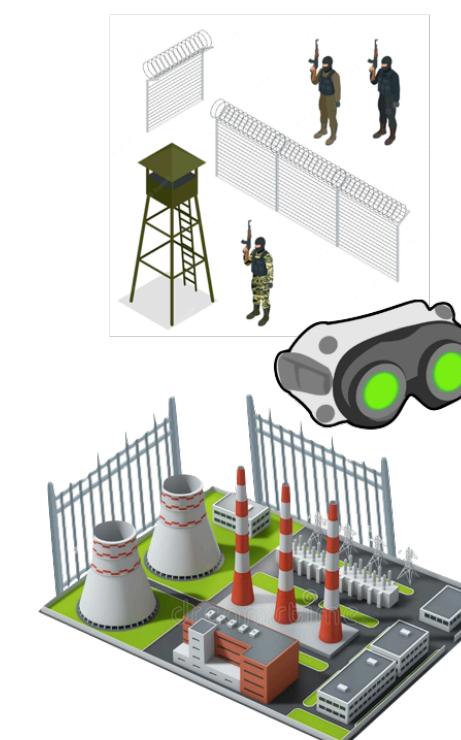
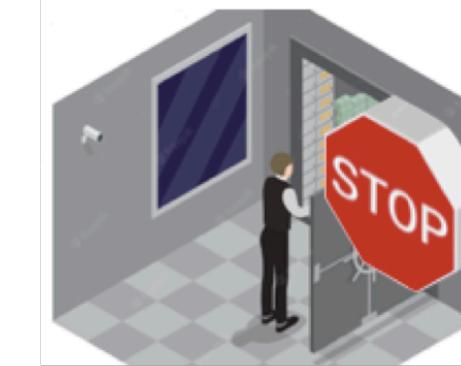
Multispectral Ai vision

New ways to use new data



Endless applications out of box

From indoors to outdoors to borders to space

STORES  Visitor walk-ins Queue lengths Service time Occupancy levels Benefits Improve service levels  Product classification - automated checkouts Benefits Improve customer service Enhance productivity Reduce leakage	QUALITY INSPECTION  Detect defects Check packaging Homologation Benefits Enhance productivity Reduce wastage	SOP COMPLIANCE  Safety equipment usage Presence of specific assets Benefits Improve safety Reduce disruptions	KEY PRODUCTS  Authorized access Record movements with staff tracking Track shelves Benefits Reduce leakage
VEHICLES  Driver Monitoring  Driver Assistance - 360 degree view Benefits Enhance safety Reduced disruptions	VEHICLE MONITORING  Vehicle in/ out records Through put Time spent in different areas Benefits Enhance productivity Reduce wastage	LOADING BAYS  Occupancy Through put Turn around times Authorized vehicles only Benefits Enhance productivity Reduce wastage	SURVEILLANCE, PERIMETER MONITORING  Zone breach Activity detection Unusual activity detection Scene Change Tracking Crowding, Loitering Blockage detection Fire, Smoke detection Benefits Enhanced safety Reduced dependence on operators Automated alerts, actions Faster remediation
ACTIVITY IN RESTRICTED AREAS  Authorized access only No tailgating Immediate alerts Open/ close doors Switch on lights Raise audio, visual alarm Benefits Reduce leakage			

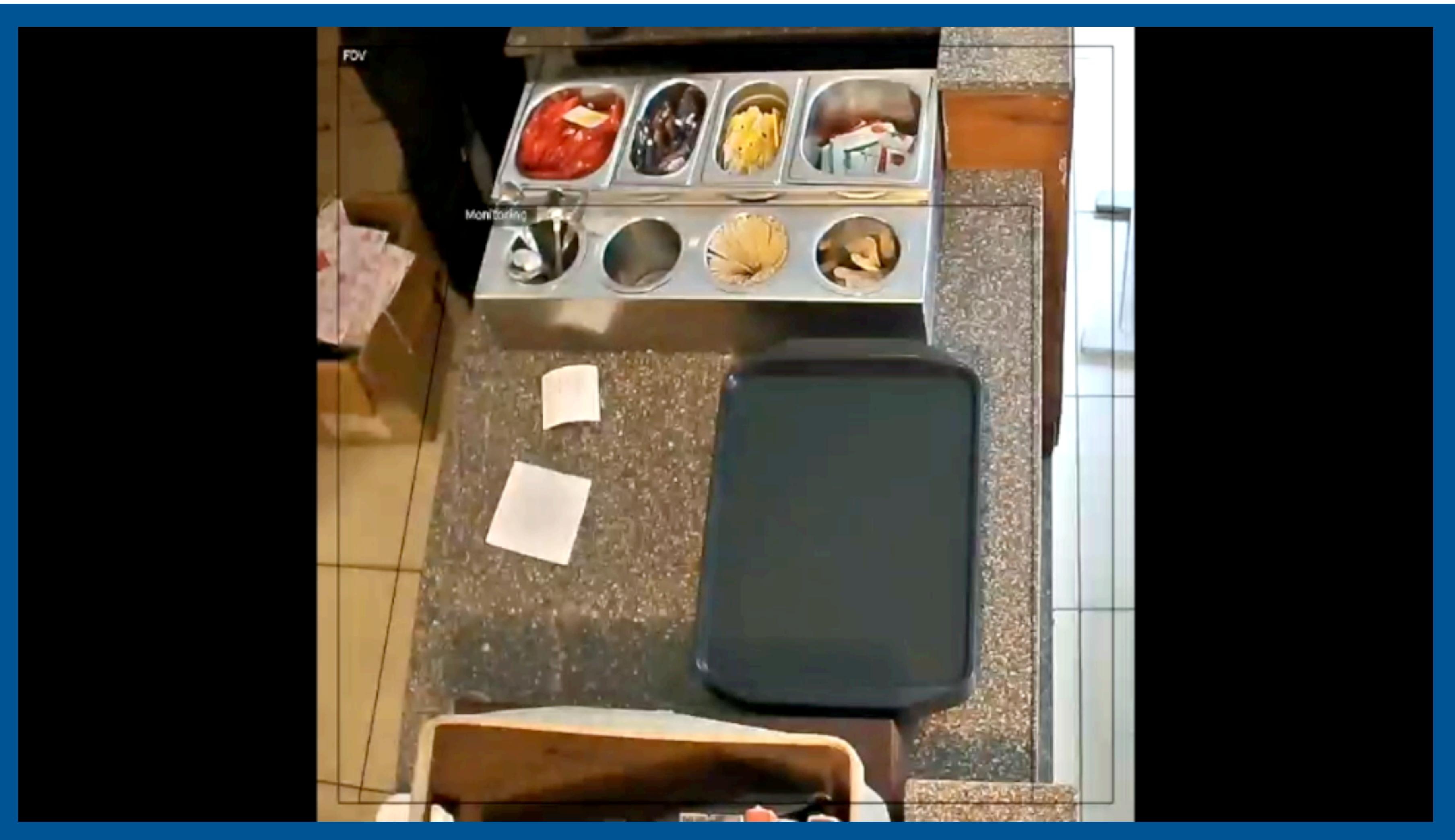
Deployments

Vehicle, Traffic, Driver, Road



Deployments

People, Process, Safety, SOP



Deployments

People, Process, Safety, SOP



Deployments

Cities, Airports, Offices



Deployments

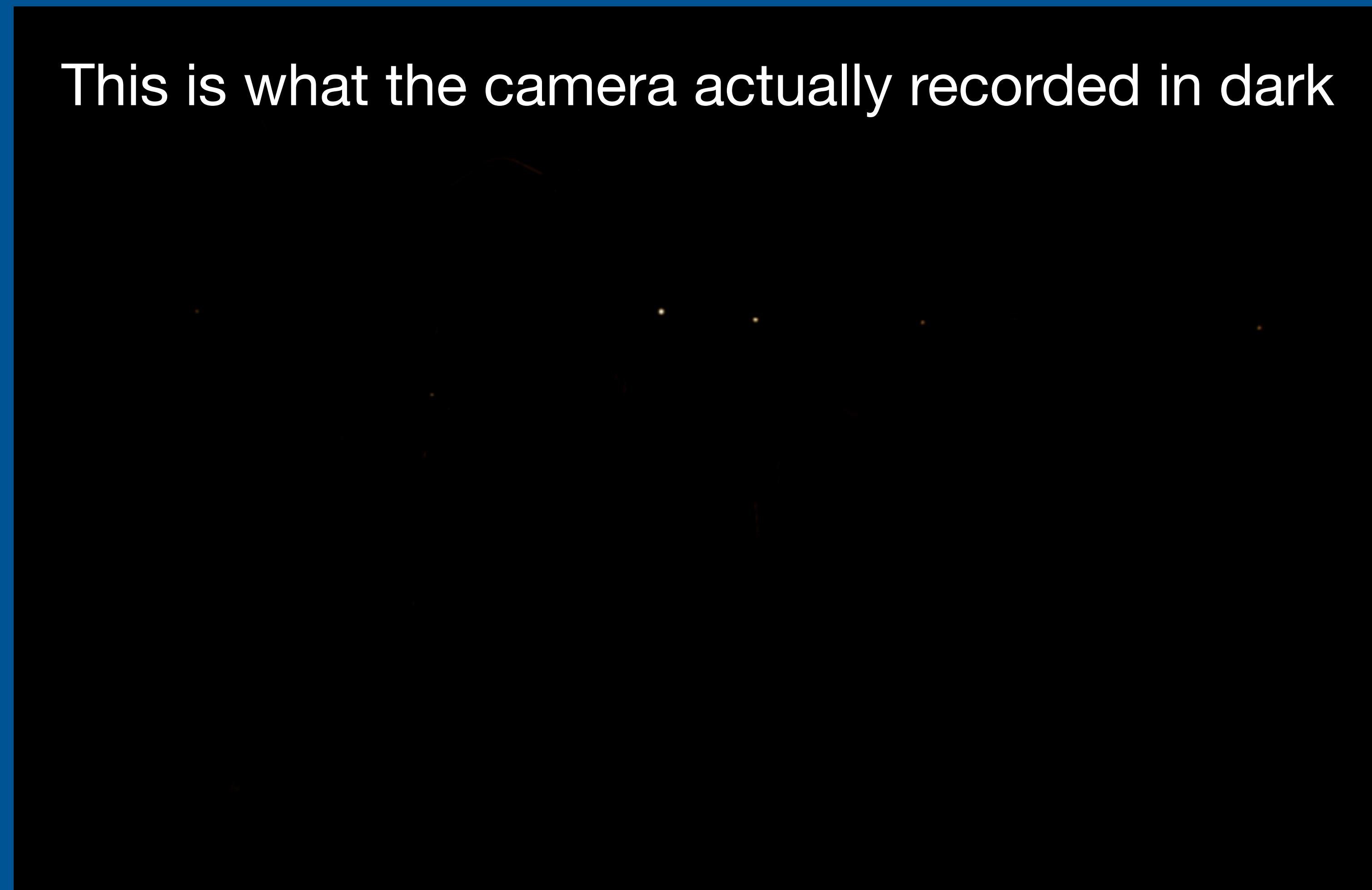
Roads, Borders, Traffic



Deployments

Facilities, Borders

This is what the camera actually recorded in dark



Deployments

Facilities, Borders

This is what the Ai software rendered



Deployments

Facilities, Borders

This is what was seen with proper light



Ai vision systems

Host of software and hardware innovations for out of box deployment



Visible and Thermal



Visible and Infrared



Visible, Thermal & Radar



Radar and Visible

Cerebros and Ai Vision

Bringing the power of Gen Ai from the edge to the cloud

