

KABAM

ROBOTICS

BRINGING ROBOTS TO THE WORLD



PROBLEM STATEMENT

“

Labour crunch for manual work in developed economies is **existential** for businesses, and caused by **ageing population and changing career aspirations**.

We believe that **robots can truly empower our service workforce**. ”

Michael Sayre
CEO/Co-Founder

Just in Singapore alone,

Ageing Population



By 2030, **1 in 4** Singaporeans will be age **over 65 years**

Ageing Workforce



Average age of security officers:
54 years old

Average age of cleaners:
60 years old



Smart+ Mission Control

KABAM specializes in robotics connectivity technologies and providing robotics solutions for smart buildings and cities



Complete Robot Solutions

CO-LAB (INDOOR SECURITY FM ROBOT)

Modular Design
For Easy
Add-On Options



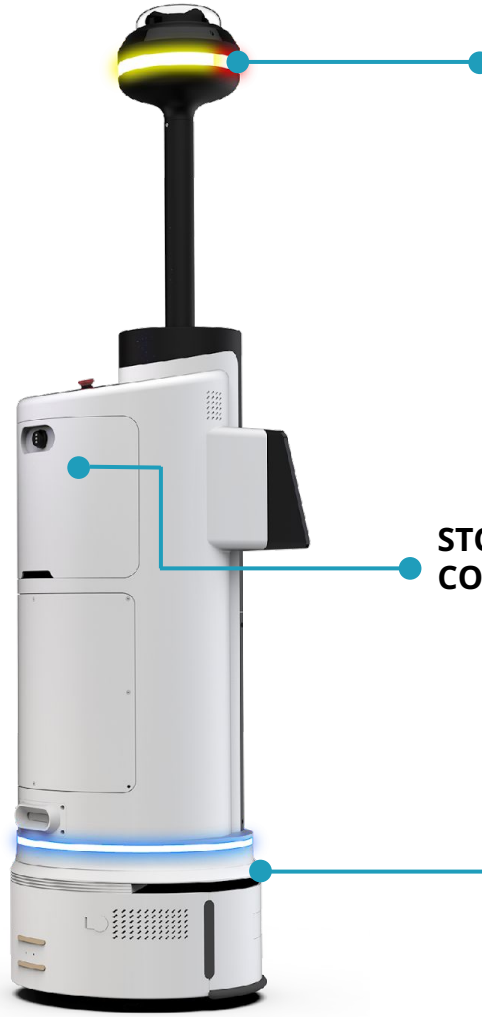
TOUCH-SCREEN PAD
FOR CONCIERGE/HELP
DESK/VISITOR
REGISTRATION



AUTOMATED
DISTURBANCE
RESPONSES

FRONT VIEW

SECURITY &
SURVEILLANCE, FACILITY
INSPECTION



STORAGE
COMPARTMENT

PA SYSTEM/
FCC ALERT

**SIDE VIEW
WITH EXTENDED TELESCOPIC**

Extendable
Telescopic 360°
Camera



HALO (OUTDOOR SECURITY FM ROBOT)

Modular Design
For Easy Add-On
Options

**SECURITY & SURVEILLANCE,
FACILITY INSPECTION**

Autonomous
Navigation with
Obstacle Detection

**AUTOMATED
DISTURBANCE
RESPONSES**

**PA SYSTEM/
FCC ALERT**

IP55 RATED

**AUTONOMOUS
DOCKING & WIRELESS
CHARGING**

FRONT VIEW

SIDE VIEW



YOUR ROBOT, YOUR SPECS

We recognise that your needs are unique, and you should not have to compromise.

Our modular design lets you specify the features and add-on options that you require, without unnecessary frill.



SMART+ MISSION CONTROL

Work Management System for All Your Robots



Lift Integration Capabilities



Device Agnostic Robot Operations Platform



Automated Alerts And Reports



Point and Click Usability



Superior Reliability

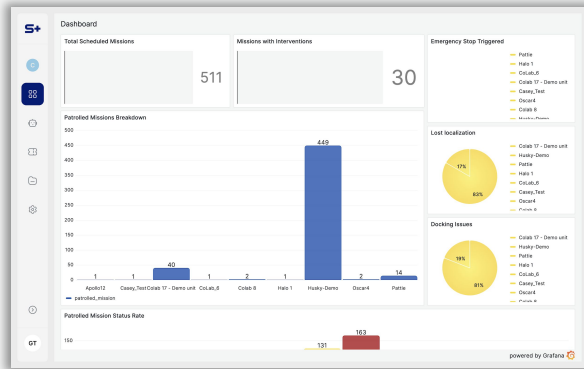


Full Interoperability



AI Video Analytics (Security and Facility Inspection)





Report Generation

Role	Name	Date added	Email	Mobile	Status	Notes
	Bill Jacobs	18 Dec 2021 09:01 AM	bill@epam.com	8151 9301	Active	3
	Charles Norrie	07 Feb 2022 12:11 AM	charles@epam.com	3102 5214	Pending	1
	Chris Harper	11 Nov 2021 03:10 AM	chris@epam.com	9853 1104	Active	1
	Francis Reynolds	12 Mar 2022 03:10 AM	francis@epam.com	8327 9878	Active	1
	Jessie Pierce	01 Nov 2021 03:11 PM	jessie@epam.com	8304 7647	Active	1
	Julie Swanson	04 Feb 2022 04:07 PM	julie@epam.com	8440 7416	Active	1
	Marie Wolf	30 Dec 2021 03:10 PM	marie@epam.com	9410 9040	Active	1
	Norma Moore	27 Dec 2021 03:09 PM	norma@epam.com	8360 9050	Active	1

User Access Management

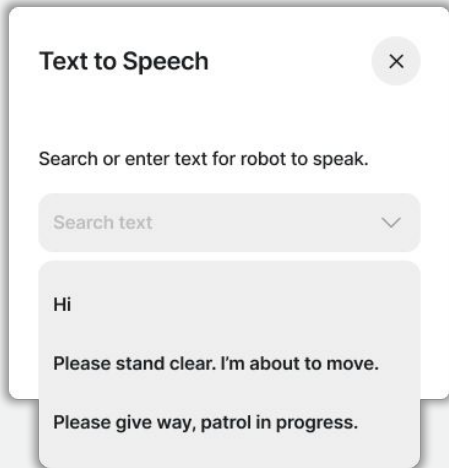
ID	Subject	Robot Name	Site	Date and Time	Status
8002208	Error in Navigation: Th...	Husky-Demo	Lake	05 Jun 2023 02:17 PM	new
8002112	Error in Status: Robot L...	Colab 17 - Demo unit	OffRoad	05 Jun 2023 11:37 AM	new
8002101	Error in Status: Robot L...	R2	Property not found	05 Jun 2023 11:37 AM	new
8002064	Error in Navigation: Th...	Husky-Demo	Lake	05 Jun 2023 10:49 AM	new
8002050	Error in Navigation: Th...	Husky-Demo	Lake	05 Jun 2023 10:49 AM	new
8002081	Error in Status: Robot L...	Merry_9	OffRoad	05 Jun 2023 10:50 AM	new
8002041	Error in Status: Robot L...	OffRoad	OffRoad	05 Jun 2023 08:31 AM	new
8002040	Error in Navigation: Th...	Colab 17 - Demo unit	OffRoad	05 Jun 2023 04:30 AM	new
8002005	Error in Navigation: Th...	Husky-Demo	Lake	05 Jun 2023 10:50 AM	new
8001987	Error in Navigation: Th...	Husky-Demo	Lake	05 Jun 2023 08:34 PM	new
8001724	Error in Localization: T...	Merry_9	OffRoad	04 Jun 2023 03:16 PM	new
8001724	Error in Battery: The no...	Merry_9	OffRoad	04 Jun 2023 03:16 PM	new
8001723	Error in Status: Robot L...	Merry_9	OffRoad	04 Jun 2023 03:16 PM	new
8001824	Error in Navigation: Th...	Husky-Demo	Lake	04 Jun 2023 10:49 AM	new
8001823	Error in Navigation: Th...	Husky-Demo	Lake	04 Jun 2023 10:49 AM	new

Ticketing and Resolution System



Point and Click Usability

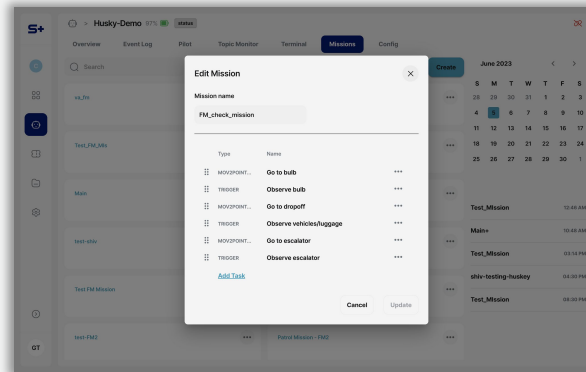
SMART+ FEATURES



Two-Way Communication Feature

Site	APOLLO 1	APOLLO 2	APOLLO 3	APOLLO 4
	28 April 2021 07:24 PM	27 October 2021 05:06 PM	27 December 2021 09:10 AM	N/A
	Casey_B	Casey_B	Casey_B	Casey_Test
	12 April 2023 02:02 PM	N/A	N/A	18 May 2023 11:29 AM
	CHARMBOT	CHARMBOT	Chargeshoot_Direct_3	Colab 17 - Demo unit
	N/A	N/A	23 May 2023 03:16 PM	Drop off Patrol Site
	Colab 2	Colab B	ColLab Workshop	Colab_07_Demo
	07 October 2021 03:01 PM	13 March 2023 11:53 AM	27 July 2022 05:21 PM	14 December 2022 04:24 PM

Device Agnostic Robot Operations Platform

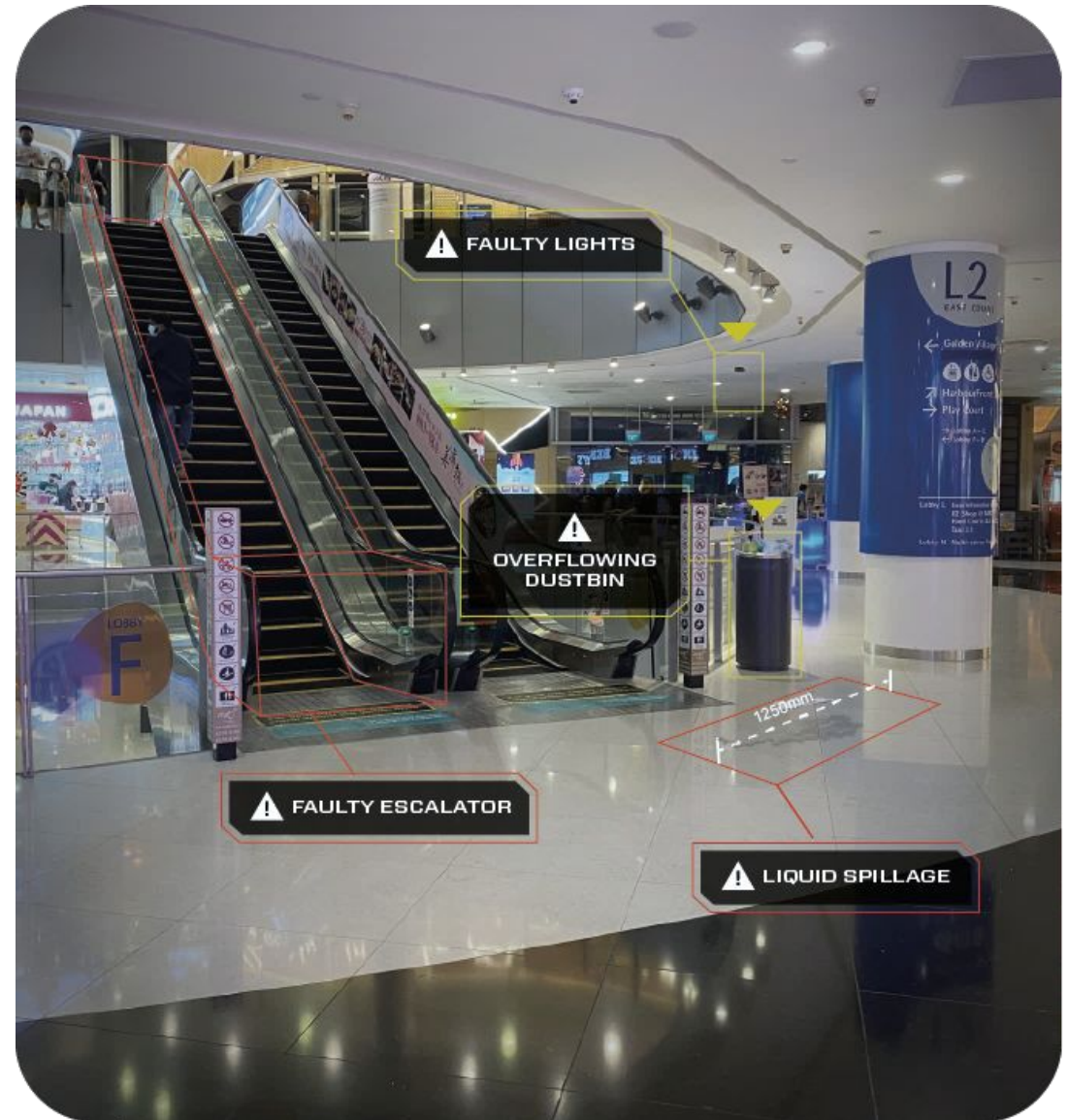


Full Mission Control and Scheduling

Message	Status	Date & Time	Source
Getting schedule last updated from: https://dev.cognicrypt.systems/api/agent/v/	OK	3 hours ago	mission_api
AGENT: STATUS: OK	OK	3 hours ago	remote_intervention_agent
WEBRTC: STATUS: OK	OK	3 hours ago	remote_intervention_agent
WEBRTC: MASTER: Connected clients: []	OK	3 hours ago	remote_intervention_agent
mission: Main status: completed (2/2) loops completed. 33% tasks (2/6) completed in 133 seconds	OK	3 hours ago	mission_controller
mission: Main status: error (2/2) loops completed. 33% tasks (2/6) completed in 133 seconds	ERROR	3 hours ago	mission_controller
Loops done: 2, Loops requested: 2	OK	3 hours ago	mission_controller
mission: Main status: error (1/2) loops completed. 33% tasks (2/6) completed in 133 seconds	ERROR	3 hours ago	mission_controller
Trigger task service request failed after max retries	ERROR	3 hours ago	mission_controller
WEB_SOCKET: STATUS: OK	OK	3 hours ago	remote_intervention_agent
AGENT: STATUS: OK	OK	3 hours ago	remote_intervention_agent
WEBRTC: STATUS: OK	OK	3 hours ago	remote_intervention_agent
WEBRTC: MASTER: Connected clients: []	OK	3 hours ago	remote_intervention_agent
Getting schedule last updated from: https://dev.cognicrypt.systems/api/agent/v/	OK	3 hours ago	mission_api
Retry task service request after retry period	OK	3 hours ago	mission_controller
Trigger task service request unsuccessful given categories does not match required categories Goal.	WARNING	3 hours ago	mission_controller

Automated Alerts

VIDEO ANALYTICS (SECURITY & FACILITY INSPECTION)



USE-CASES & VA DETECTIONS

- Autonomous Patrol
- Detection of Blacklist Individuals (Face Recognition)
- Detection of Broken or Jeopardized Fence
- Detection of Crowd and People Counting
- Detection of Illegal Parking
- Detection of Illegal Smoking
- Detection of Littering in Public Space
- Detection of Loud Sound (eg: Glass Breakage, Gunshot, Shouting)
- Detection of Missing Person
- Detection of People in Prohibited Area
- Detection of People Loitering
- Detection of Public Vandalism
- Detection of Stolen Vehicles
- Detection of Unattended Objects
- Deterrence of Overstaying Vehicles at Drop-off Point
- Identifying Authorized and Unauthorised Personnel
- Public Announcement upon Detection
- Text-to-Speech to Deter Intruders
- Video Footage Storage



- Detection of Faulty Escalator
- Detection of Faulty Lights
- Detection of Open Doors
- Detection of Overflowing Bins
- Meeting Room Management
- Vendor Management
- Wi-Fi Scanning and Report Generation



- Directory Kiosk
- Events, Advertisements and Promotional Displays
- Follow-me Mode
- Text-to-Speech Announcements
- Two-way Communication
- Visitor Management



- Detection of Fire/Smoke
- Detection of Individuals Wearing Incomplete PPE
- Detection of Obstructed Fire Escape Route
- Public Announcement for Safety Protocols



FULL INTEGRATION TO YOUR BACKEND PLATFORM

Use-case 1

Equipped with a storage compartment, Co-Lab is able to deliver toiletries to hotel guests.

Following the successful completion of each delivery, Co-Lab will notify the command centre by sending a report.

Use-case 3

With the aid of its sensors and advanced video analytics capabilities, Co-Lab effectively scans and perceives the environment.

Upon detecting an unattended item, Co-Lab promptly generates an alert to notify the command centre.

This alert includes an image of the item and details regarding the unattended item's location.



Use-case 2

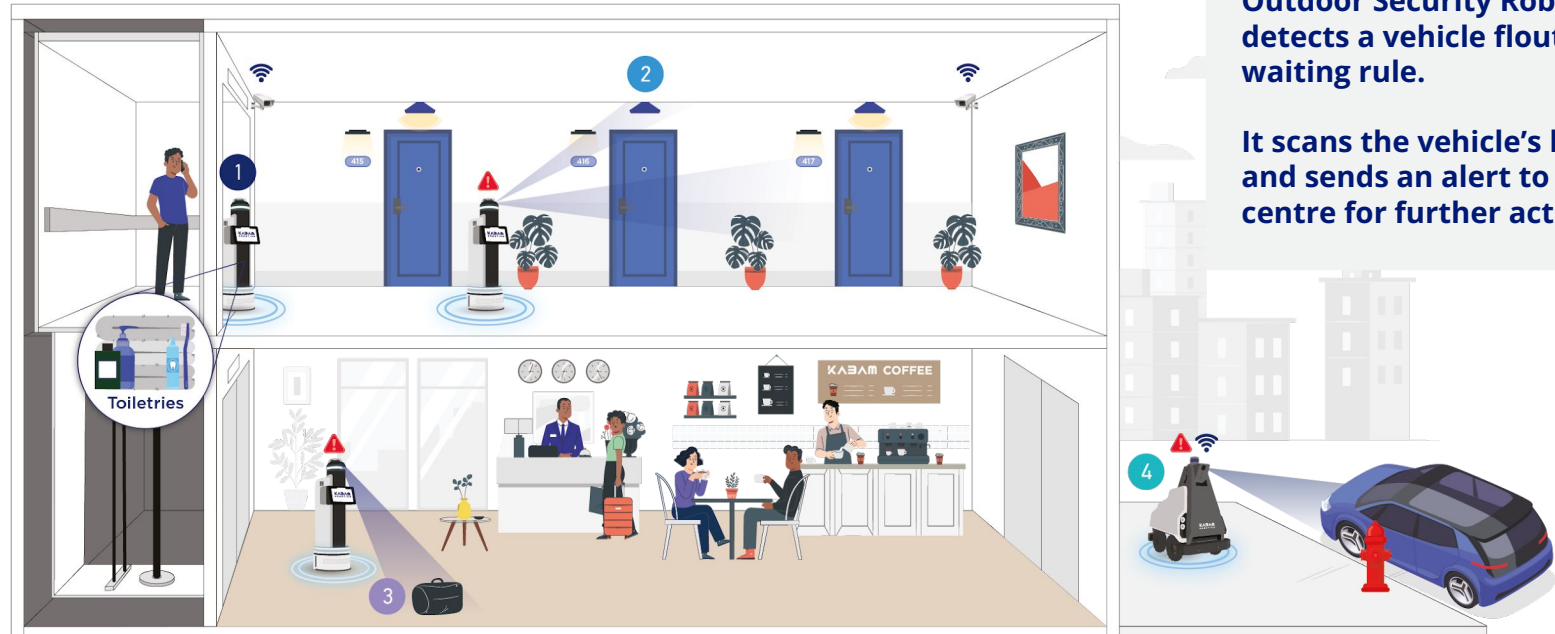
When a faulty light is detected, Co-Lab can send an alert to the command centre.

This alert can include relevant information, such as the location of the faulty light and the type of fault detected.

Use-case 4

Outdoor Security Robot, Halo, detects a vehicle flouting the no waiting rule.

It scans the vehicle's license plate and sends an alert to the command centre for further actions.

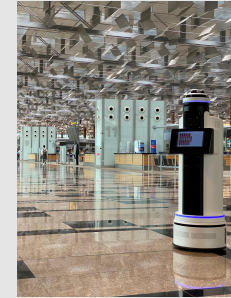


GLOBAL DEPLOYMENTS

313 Somerset
Attorney-General's Chambers: AGC
CDW Building (Hong Kong)
Changi Airport
Cross Street Exchange
Devan Nair Institute For Employment And Employability
Drakes Supermarkets (Australia)
Fusionopolis
Jewel Changi Airport
JTC Summit



PUB@Bedok Reservoir
Rochester Mall
Singapore Chinese Cultural Centre
Singapore Examinations and Assessment Board
Singapore Flyer
Taipei Songshan Airport
Taiwan Taoyuan International Airport
Toa Payoh HDB Hub
Vivocity
Wisma Geylang Serai
Woodlands Integrated Transport Hub (WITH)



KK Women's & Children's Hospital
Lifelong Learning Institute
Ministry of Finance
National University Singapore
Orchard Central
Our Tampines Hub
Paya Lebar Quarters (PLQ)



Singapore Management University (SMU)
Singapore Parliament House
Singapore Zoo
SIT@Dover
Supreme Court
Tan Tock Seng Hospital

And many more...



Best in Unmanned – Drones & Robots for Security

ISC West, Las Vegas, 2023



Best Robotics Firm

Singapore Security Industry Awards, 2022



Best New Product

Sydney Security Exhibition + Conference, 2022



Best Security Robotics

Singapore Safety & Security Asia, Merlion Awards, 2022



'Tis the season to Skill-up!
Lifelong Learning Institut
11 Road

KABAM

ROBOTICS

A white KABAM robot with a screen and sensors is shown in a dark, tiled environment.

KABAM Robotics



www.kabam.ai