MACROACT

Make Robots Active & Smart

Macroact is an AI and Robotics startup that designs and develops smart robots for your home.
With over 15 years of experience in software and hardware development, we use our expertise to find innovative solutions to combine robotics and AI technology to create the next generation of smart robots.

Our goal is to become a leader in robot innovation technology and to support, inspire and empower people with our work.

01 Passionate about Robotics & AI

03 Transform Human-Robot-Relationship

02 Create accessible & serviceable Products

04 Create a better Life

Follow us

Macroact Website   http://macroact.com
Macroact E-mail   support@macroact.com
Visit http://macroact.com
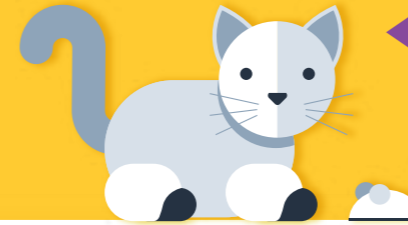and sign up to our mailinglist for updates & news or message us at support@macroact.com

maicat ™

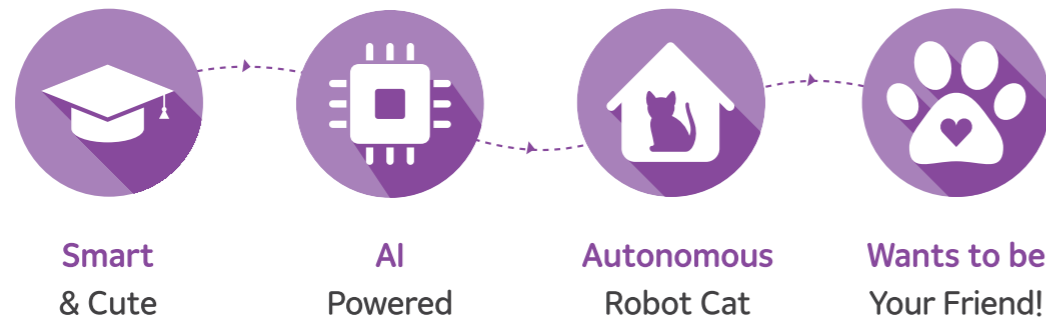## The cutest way to combine
AI & Robotics

maicat™

The cutest way to combine AI & Robotics

🐾 Who is Maicat?

Ever wanted to take care of a pet but a busy schedule, limited resources, space or health issues got in the way?

Smart & Cute

AI Powered

Autonomous Robot Cat

Wants to be Your Friend!

Interactive Companion

Cutting–edge technology makes interacting with Maicat a fun and engaging experience. Maicat gets smarter every day, the more it is exposed to the world around it the more skillful Maicat becomes. With your help and affection Maicat will soon adapt to its new home and curiously explore the environment.

Maicat

A part of your family

A companion for your pet

01 Emotion & Personality

Maicat senses your emotions and reacts to your mood.
The way you interact with Maicat influences its personality over time.

02 Family & Friend

Maicat is able to recognize different faces and rates them according to their behavior. However, you will always be prioritized as its closest friend and primary caregiver!

03 Always there for you

Comming home from an exhausting day at work, feeling lonely, being bored or just looking for some company? Maicat is there for you and might cheer you up with a friendly greeting! Maicat is happy to be around its favorite person and loves getting your attention!

maicat™ Technology
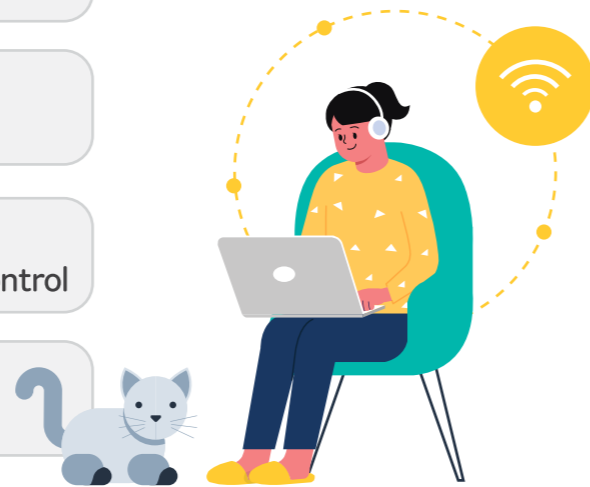
Smart Tech in a Small & Cute Design

Adaptive pet robot
powered by AI

Microcomputer with
hierarchical intelligence system

Trained via reinforcement learning:
basic movement, incl. walking → Actuator control

Face-, Voice-, Emotion-Recognition
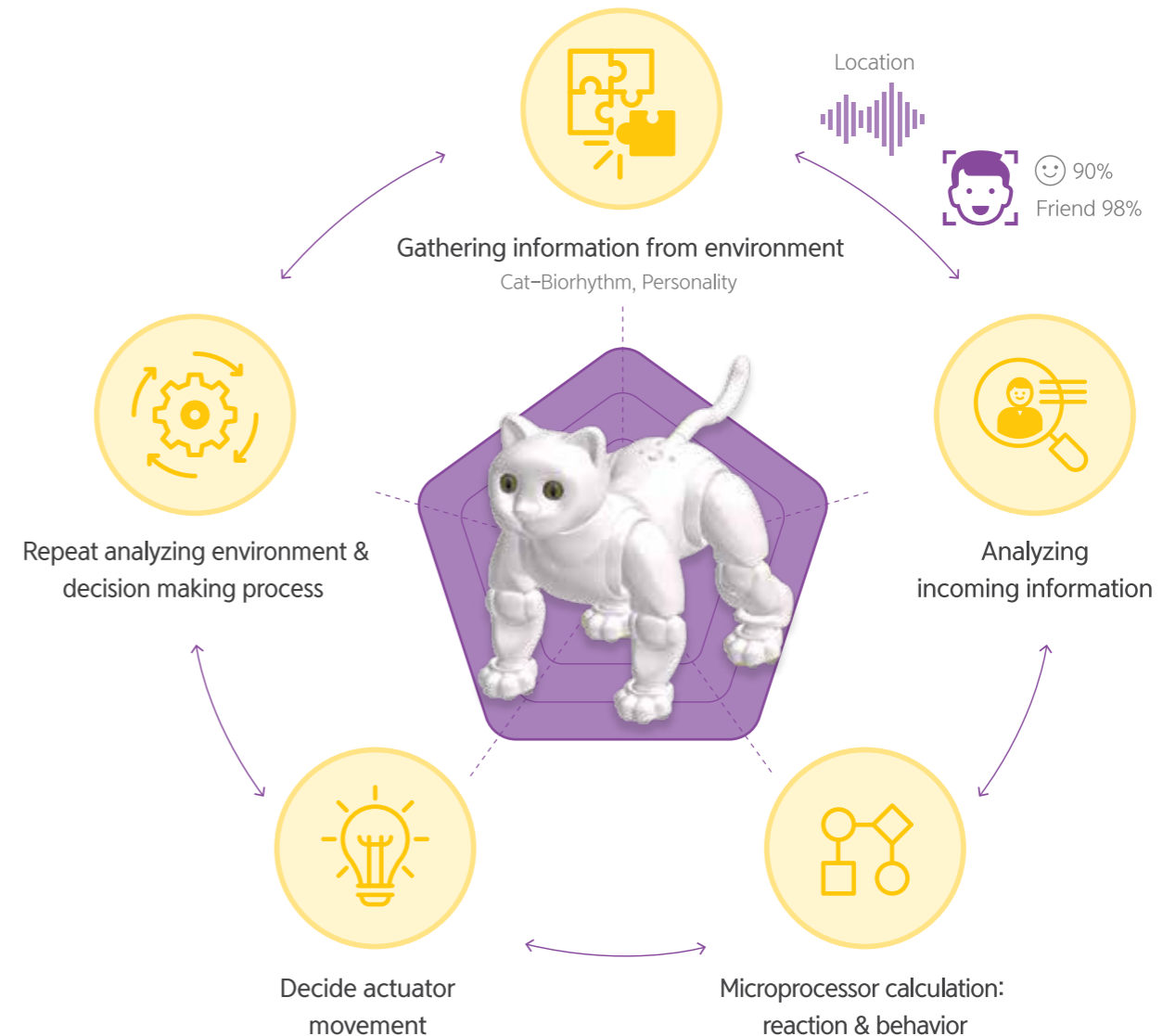through camera & microphone

Autonomous learning

Instead of pre-programming, Maicat figured out how to walk, master basic movements, and gain control over its actuators via reinforcment learning. This approach makes Maicat more adaptable and capable of performing a variety of tasks without human intervention.

Layered Intelligence System

Maicat evaluates information recieved through camera and speaker to detect the source of sound and analyzing the situation based on an emotional intelligence algorithm. The layered intelligence system helps to determin how to react and which action to take.

What is driving Maicat?

Location

90%
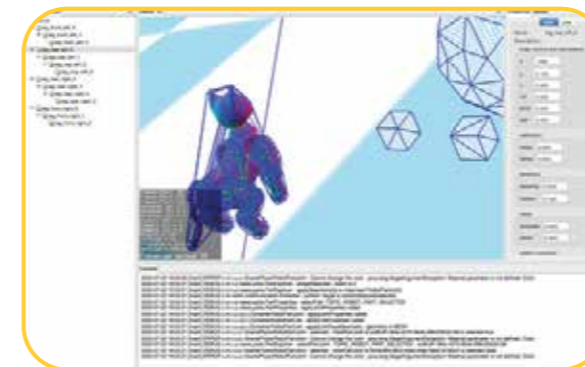Friend 98%

Gathering information from environment
Cat-Biorhythm, Personality

Analyzing
incoming information

Repeat analyzing environment &
decision making process

Microprocessor calculation:
reaction & behavior

Decide actuator
movement

maicat™ Technology

Smart Tech in a Small & Cute Design

Features & Specifications	
Dimensions	20cm(l) x 13cm(w) x 20cm(h)
Weight	1,2 KG
Battery	Lithium (self- charging)
Display	OLED eyes
Micro Computer	Quad-Core CPU
Camera	1
Sound	Speaker, Microphone
DoF	20
Sensor	9
Material	ABS, Glass, Silicon
Connectivity	Bluetooth, WIFI

🐾 Maitools & Maicloud

Maitools

The Maitools simulator allows you to define robots, environments and tasks. The entered data is transferred to the cloud and converted into training data. While training takes place in the cloud you can watch the learning process in the simulator.

Maicloud

In the Maicloud the simulated robot learns the optimal control method for the specified task. The trained model is published so that it can be applied via API, ROS package and data to the real robot.