

Mollia

UNLOCKING THE POTENTIAL
OF **HUMANOID ROBOTS**

**MOLLIA IS DEVELOPING
KINEMATIC INTELLIGENCE
FOR THE ROBOTS OF THE FUTURE,
BY PROVIDING A PLATFORM TO
CROWDSOURCE THE KINEMATIC
TRAINING THROUGH VIDEO GAMES.**

VISION

INTELLIGENT, **AUTONOMOUS** HUMANOID ROBOTS
HAVE THE POTENTIAL TO SOLVE SOME OF OUR
GREATEST CHALLENGES AND MOST MENIAL TASKS

DANGEROUS JOBS

HOUSEHOLD CHORES

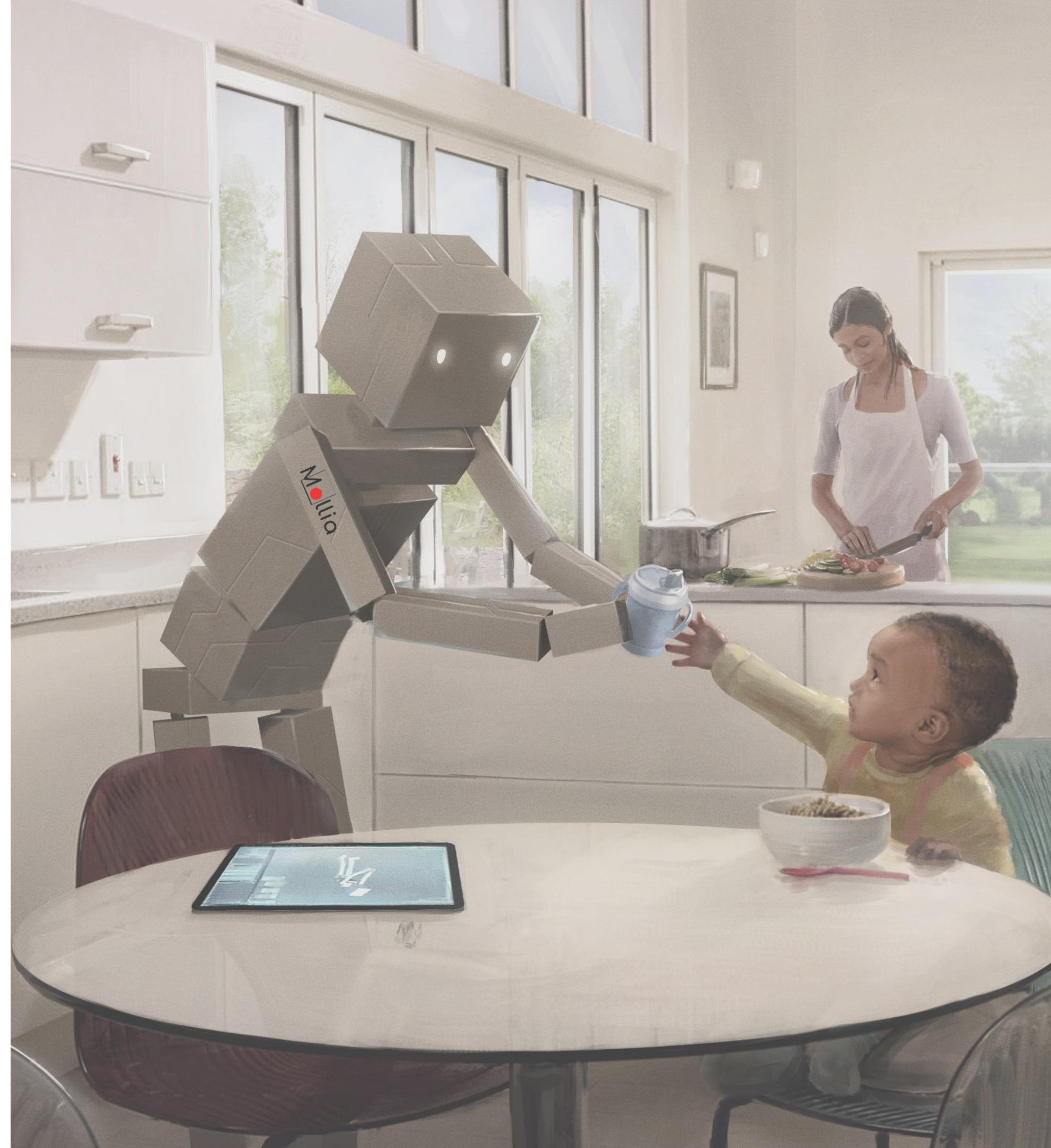
ENVIRONMENT
CLEANUP

DISASTER RESPONSE

ELDERLY CARE

SPACE EXPLORATION

The race is on to capture a market
worth tens of billions.



03-02-23

The race to build AI-powered humanoids is heating up

Figure 01 is a bipedal, AI-powered humanoid. And it wants to work in a warehouse.



ROBOTICS

Musk expects Tesla Bot to be a much bigger business than its cars

By Loz Blain
March 02, 2023

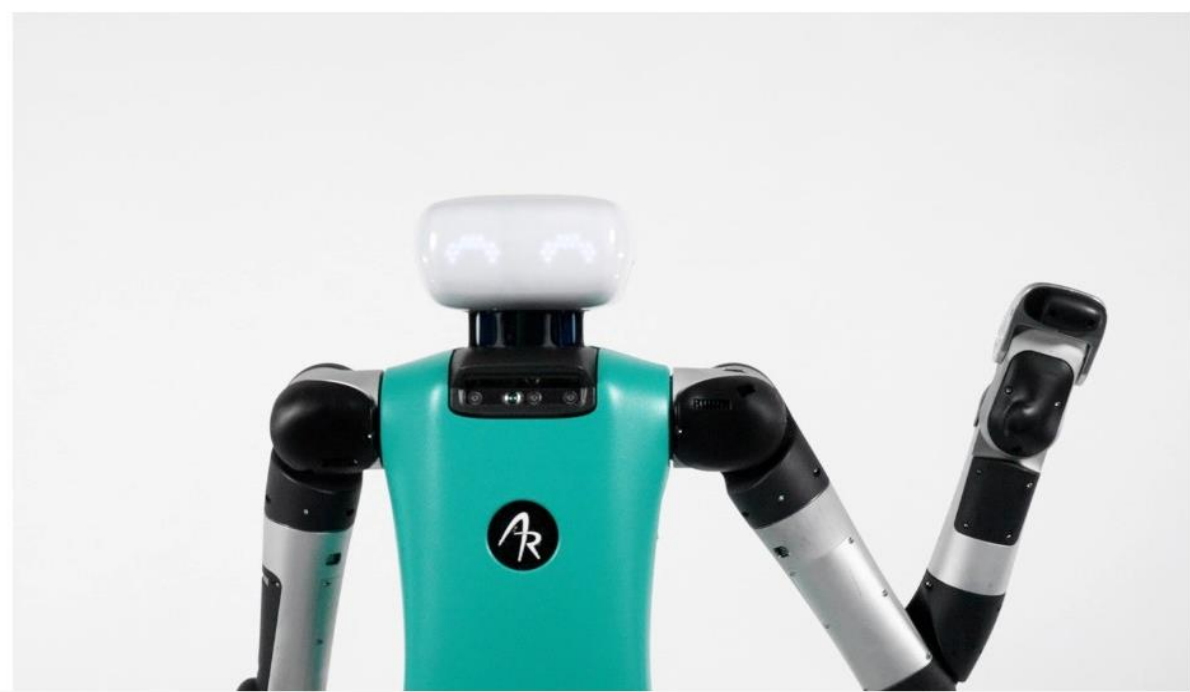


Robotics

Meet the new face of Agility Robotics' Digit

Brian Heater @bheater / 1:30 PM GMT+1 • March 20, 2023

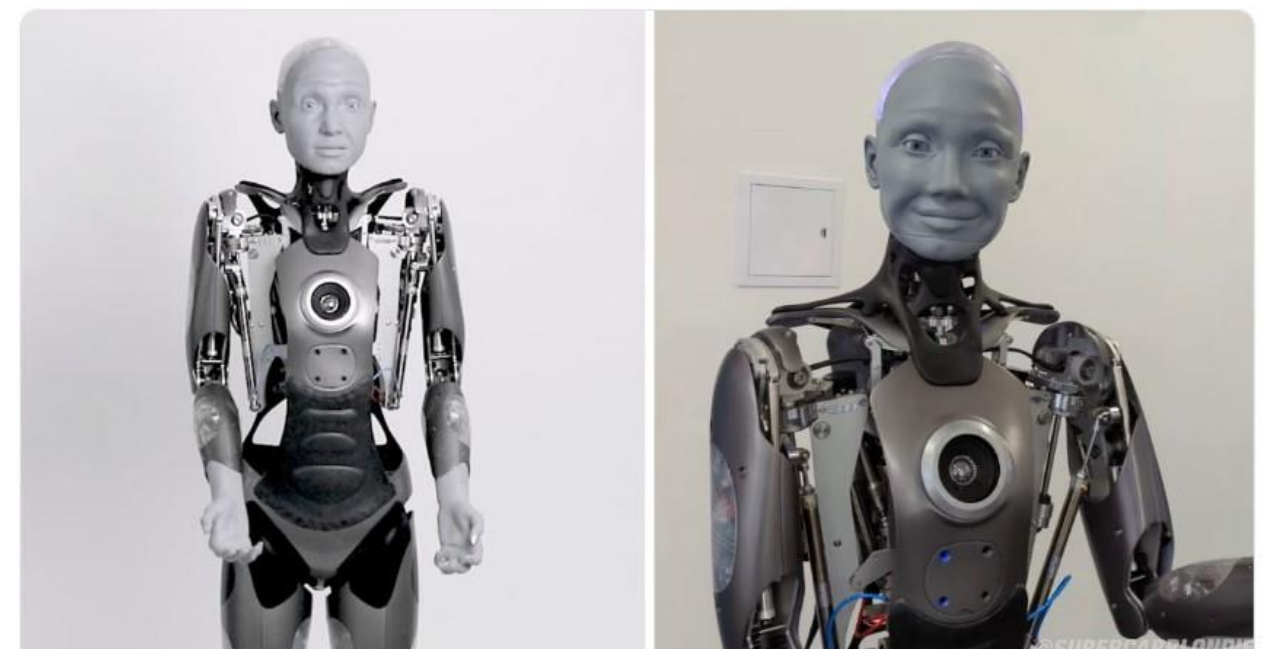
Comment



The world's most advanced humanoid robot admits she gets 'tired of showing humans what I can do'

Meet Ameca, the world's most advanced humanoid robot. She is powered by AI and can answer just about any question she's asked.

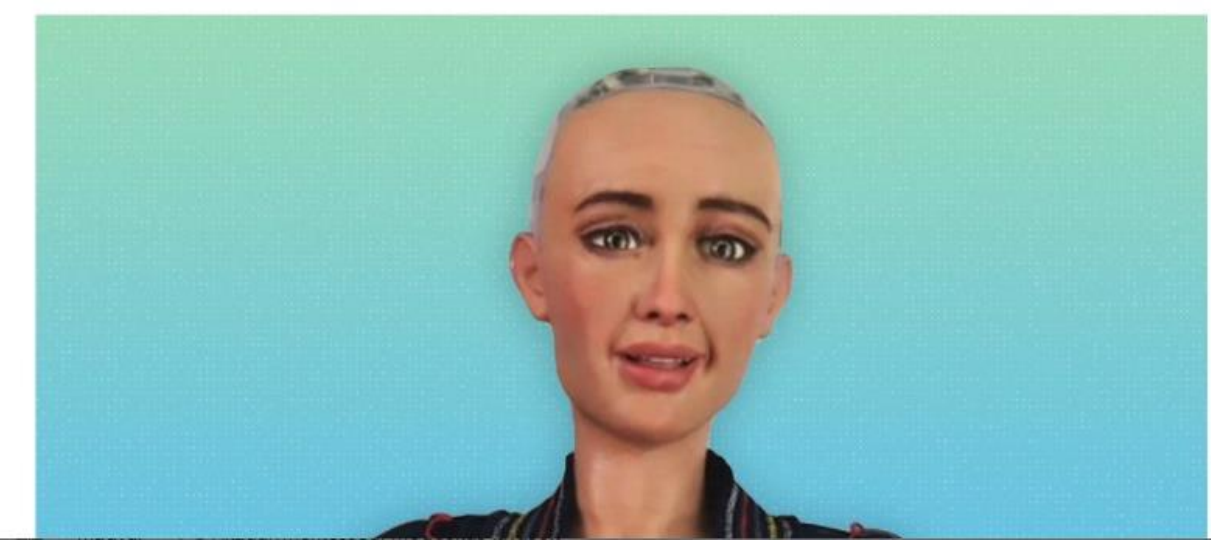
Kate Bain Published on 3rd Mar 2023



LEADING TECH

We Asked ChatGPT and Sophia the Robot to Predict the Impact of A.I. on the Business World. Here's What They Said

BY BEN SHERRY, STAFF REPORTER @BENLUCASSHERRY





PROBLEM

EXISTING HUMANOIDS TODAY CAN ONLY DO STUNTS AND DEMOS BUT THEY ARE **NOT REALLY USEFUL**

- **TRAINING IS DIFFICULT & EXPENSIVE**
- **LIMITED ADAPTABILITY**
- **NO INTERACTION WITH PEOPLE**

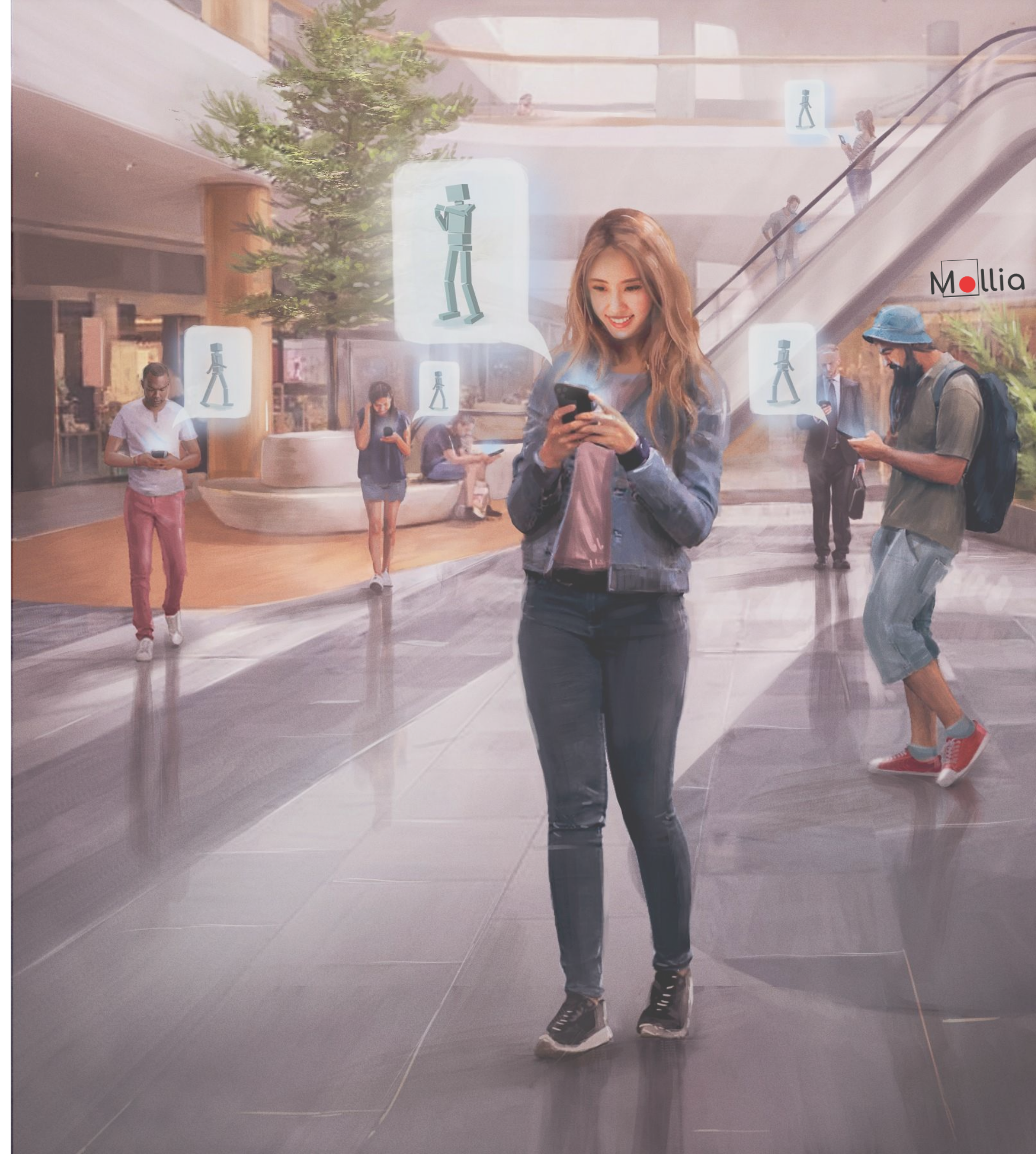
Until now, no company has been able to achieve training on a large scale.

SOLUTION

CROWDSOURCING THE KINEMATIC TRAINING,
MAKING IT EASIER, FASTER AND CHEAPER

- **TRAINING IS SIMPLIFIED AND FUN**
- **AUTONOMOUS ADAPTABILITY**
- **INTERACTIVE PLATFORM**

By gamifying the experience we can involve millions of people in the training process.





OUR TECHNOLOGY

COMMUNITY-DRIVEN VIRTUAL ROBOT TRAINING AT **SCALE**

Mollia is developing a **Natural Machine Intelligence** technology that enables robots to learn kinematics skills intuitively from humans.

Compared to traditional neural network-based solutions, our solution requires **much less data and time** to train robots, and the learned skills are **more transferable** to other tasks.

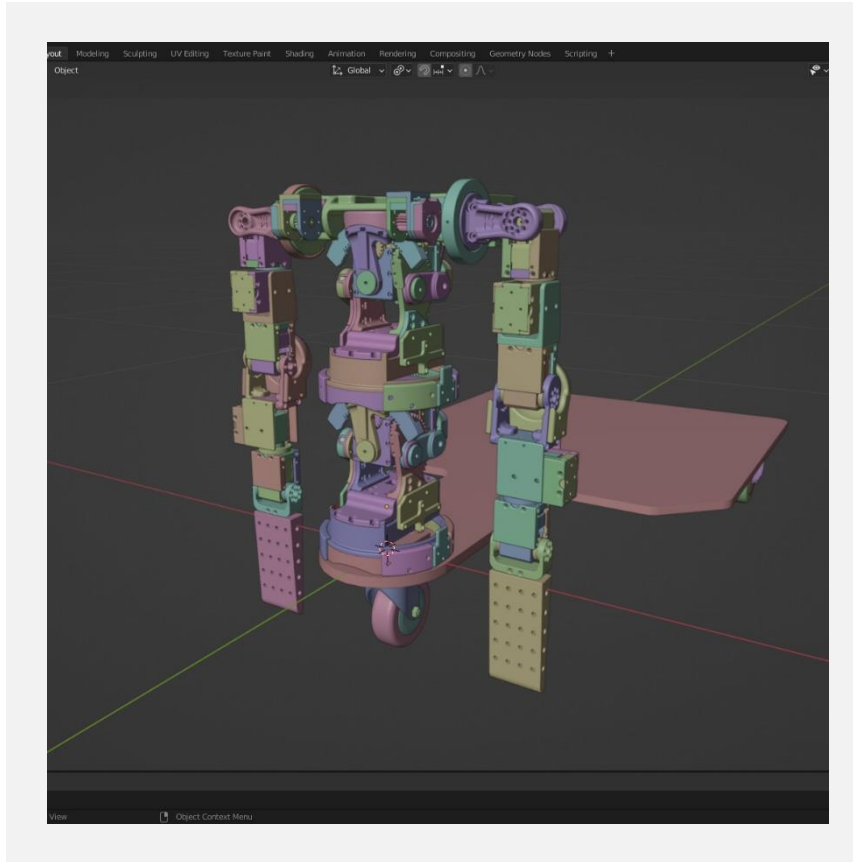
Our technology makes it possible to involve a large number of people in the development process and **crowdsource the kinematic training** of robots through **video games** that run in real-time physics simulation.

Through this process, a huge **library of kinematic** movements will be created that will then become the basis for physical robotic training.

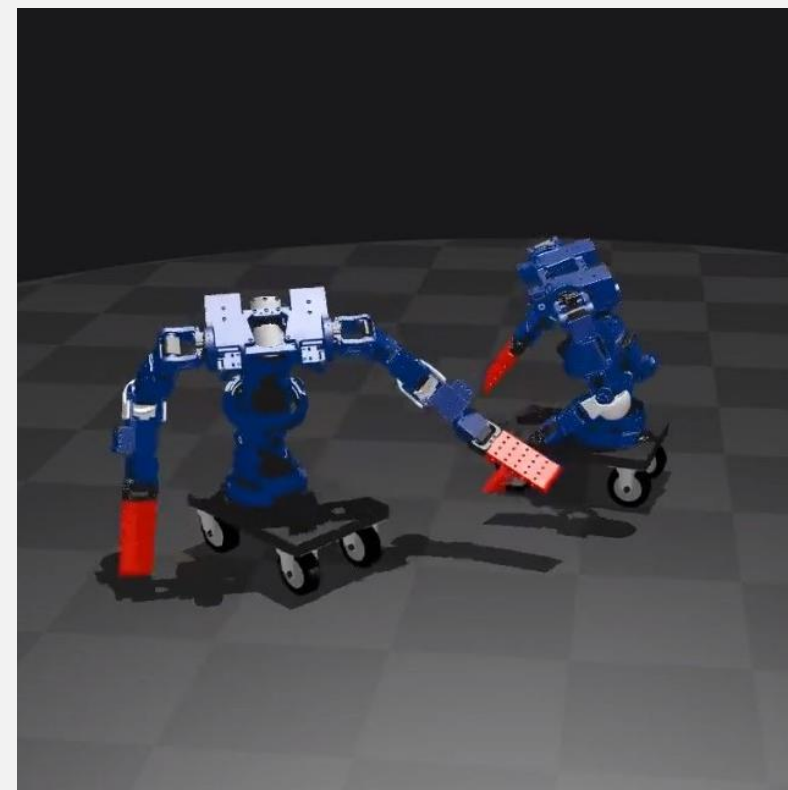
Collectively creating the world's most diverse kinematic dataset for robots.

THE Mollia WAY OF TRAINING ROBOTS

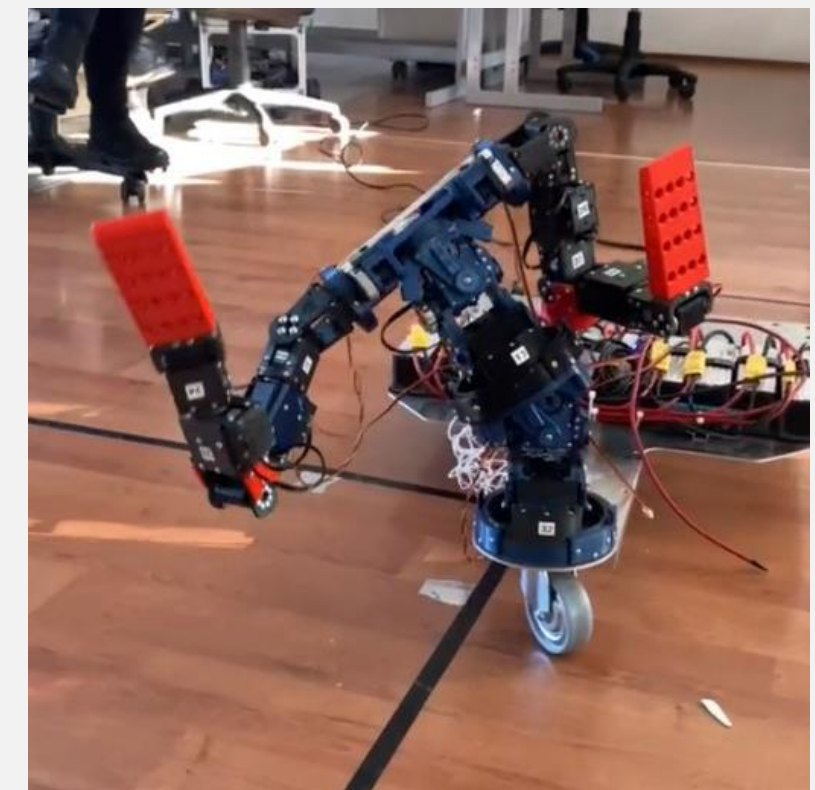
MODELING, GAMIFYING, **TRAINING** AND DEPLOYING



MODELING AND DESIGNING THE ROBOT & TRAINING ENVIRONMENT



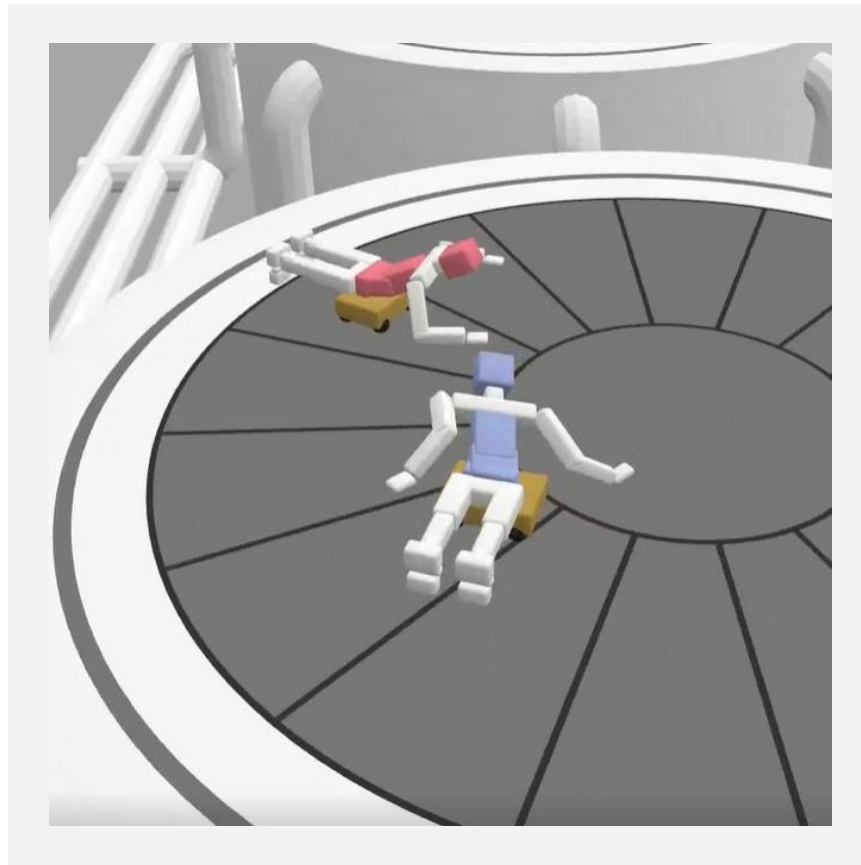
VIRTUAL TRAINING IN REAL-TIME PHYSICS SIMULATION-BASED GAMES



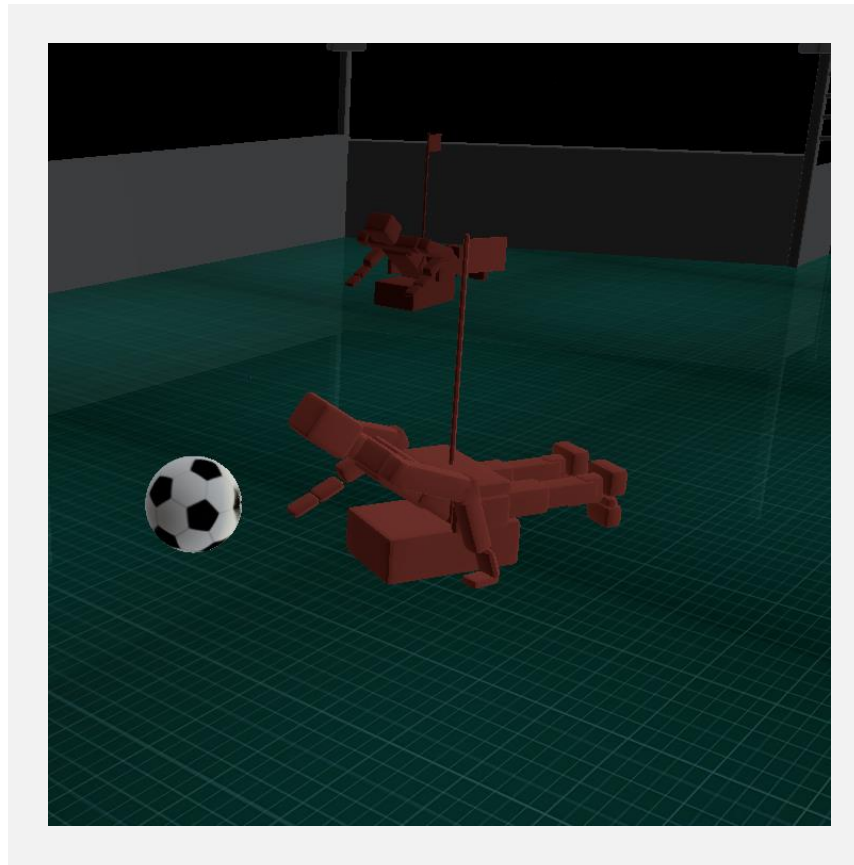
APPLYING THE LEARNED SKILLS TO REAL-WORLD ROBOTS

GAMIFIED TRAINING EXAMPLES

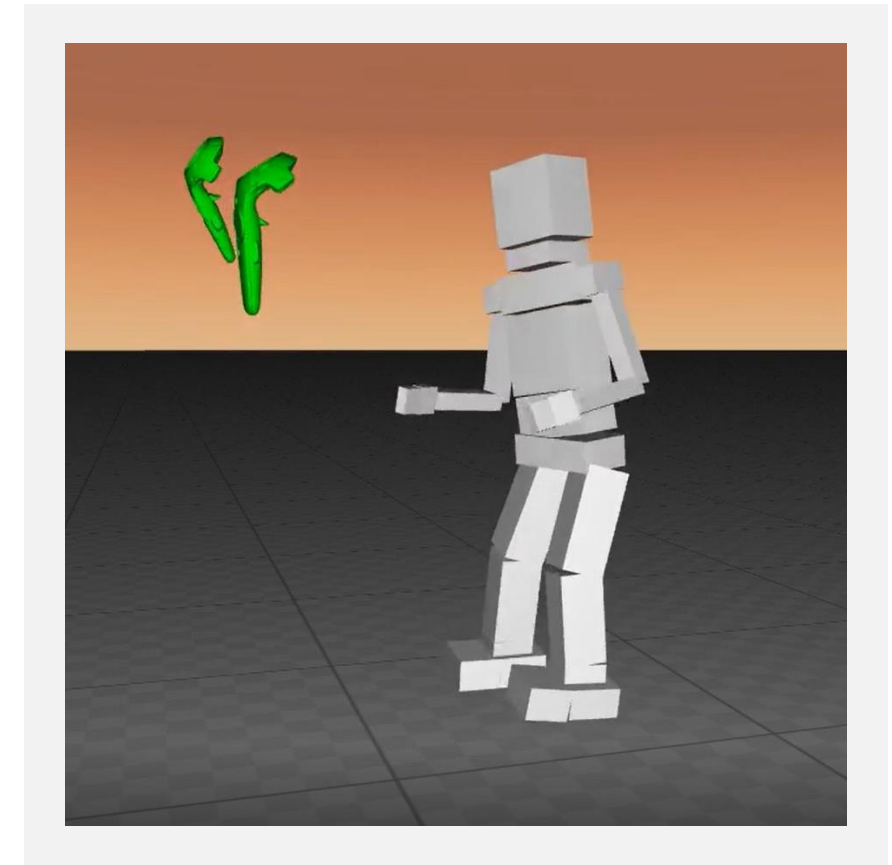
PEOPLE ARE HAVING **FUN** WHILE TRAINING **REAL SKILLS** TO ROBOTS –
COULD THIS BE THE OLYMPICS OF THE METAVERSE?



UPPER BODY CONTROL - SUMO



OBJECT MANIPULATION - SOCCER



BIPEDAL WALKING

VIDEOS

GO-TO-MARKET STRATEGY

PHASE 1 – VIRTUAL ROBOTS, VIDEO GAMES, DATA COLLECTION

The Molliaverse: our robot-training virtual universe, where players can train robots while playing.

This provides robotic companies with the opportunity to demonstrate their robots to a large audience through an interactive experience.

We collect the training data.

PHASE 2 – IMPROVING THE KINEMATICS OF REAL ROBOTS

Based on the feedback provided by the people using the robots in the virtual environment (control mechanism, use-cases, ease of use, etc.) the robotic companies will be able to improve their robots.

Using the collected data in the Molliaverse, we can improve the kinematics of actual robots.

PHASE 3 – PLATFORM TECHNOLOGY TO SUPPORT OTHER INDUSTRIES

In the future, we will provide a technology API to enable other industries to take advantage of our Natural Machine Intelligence technology.

Health care (robotic prosthetic arms, exoskeletons), smart manufacturing, elderly care, space exploration, and defense could all benefit from this technology.

THE Mollia TEAM



DÁNIEL JOÓ

CTO

PhD in Mathematics, researcher at Alfréd Rényi Institute of Mathematics of the Hungarian Academy of Sciences since 2014, 15+ years experience



ANDRÁS JOÓ

CHIEF ARCHITECT

Serial entrepreneur, PhD in Psychology, mathematician, has been working on the mathematical foundation of Mollia since 1998, 40+ years experience



DÁNIEL VINCZ

CEO

Serial entrepreneur, computer engineer, 'Legend Award' Malaysia 2019, '2050 Youth Award' China 2020, advised multiple startups, 10+ years experience.



IGNÁC SIBA

COO

Serial entrepreneur, angel investor, ex-CFO at Citigroup at CEEA, ex-Managing Director at Economic Development Operational Programme responsible for \$3.6 billion, 30+ years experience.



ISTVÁN SZÖLLÖSI

DEPUTY CTO

PhD in Mathematics, researcher with multiple international publications, assistant professor at Babes-Bolyai University, 15+ years experience

110+ YEARS OF EXPERIENCE COMBINED

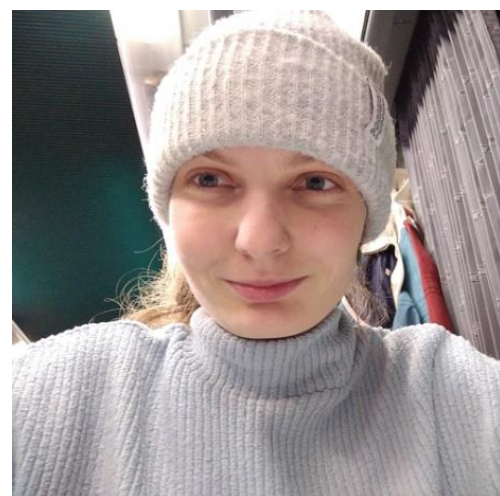
WE WORK WITH AMAZING PEOPLE

OUR TEAM IS PASSIONATE ABOUT BUILDING AN ABUNDANT FUTURE THROUGH HUMANOID ROBOTS



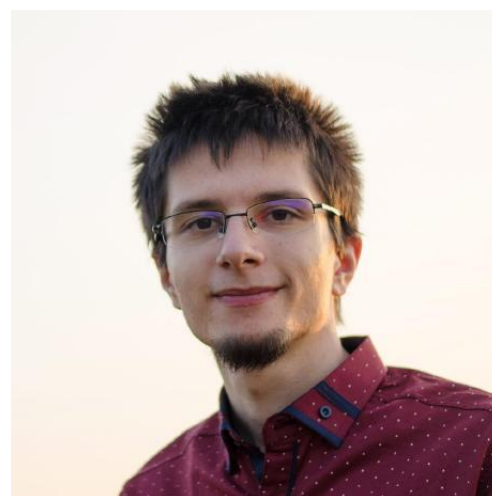
BEÁTA MÁRTON

Software Development



RÉKA ANDRÁS

Software Development



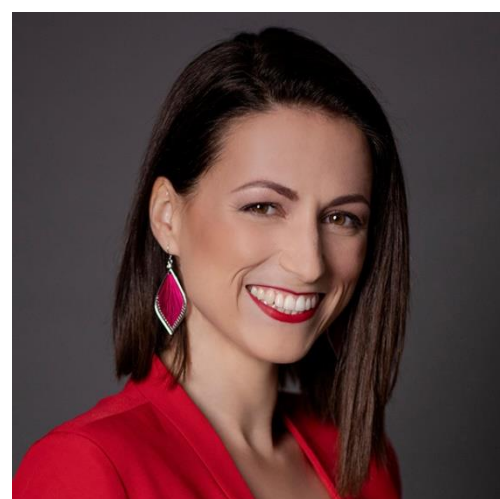
SZABOLCS DOMBI

Software Development



KATALIN NAGY

Office Manager



DR. KATA KONSTANTIN LL.M

Legal Advisor, EU grants



ENDRE MACHER

Mechanical Engineering

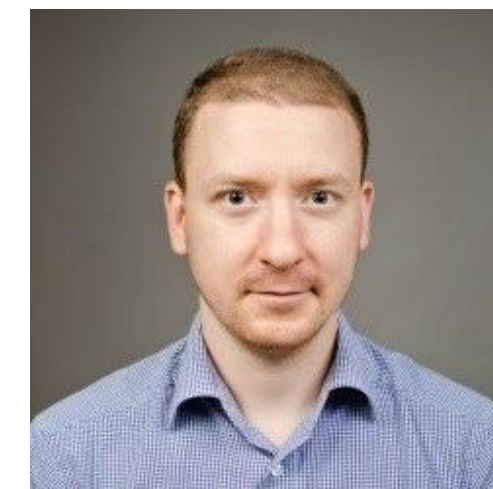
ADVISORS



TIM FIELDS

GAMING + LEADERSHIP

Leadership positions at Hasbro, Wizards of the Coast, Kabam, Microsoft, Electronic Arts, Activision, Capcom, etc.; 27+ years game development experience



PETER GALAMBOS

ROBOTICS

Director of Antal Bejczy Center for Intelligent Robotics, Obuda University CTO of Maxwhere, Researcher



KENT BABIN

WEB3

7+ years helping Web3 projects get off the ground, along with 15+ overall in the tech industry and 5+ in communications.



OUR ROCKSTAR PARTNERS



VESPUCCI PARTNERS

Venture Capital / Hungary



IRONFOX GAMES

Game Development / Canada



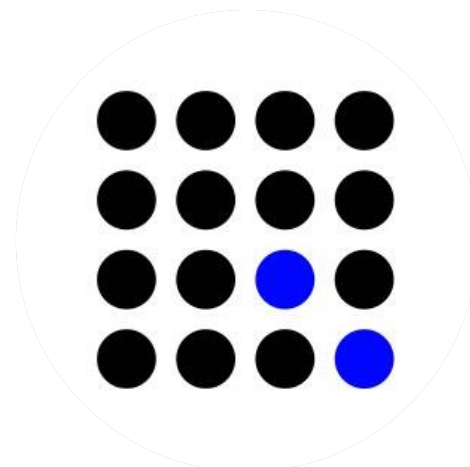
Blockchain Game Alliance

Blockchain Games / USA



OBUDA UNIVERSITY

Robot Development / Hungary



QAMCOM GROUP

Data Science / Sweden



NVIDIA

Inception Program (AI) / USA



FORMLABS

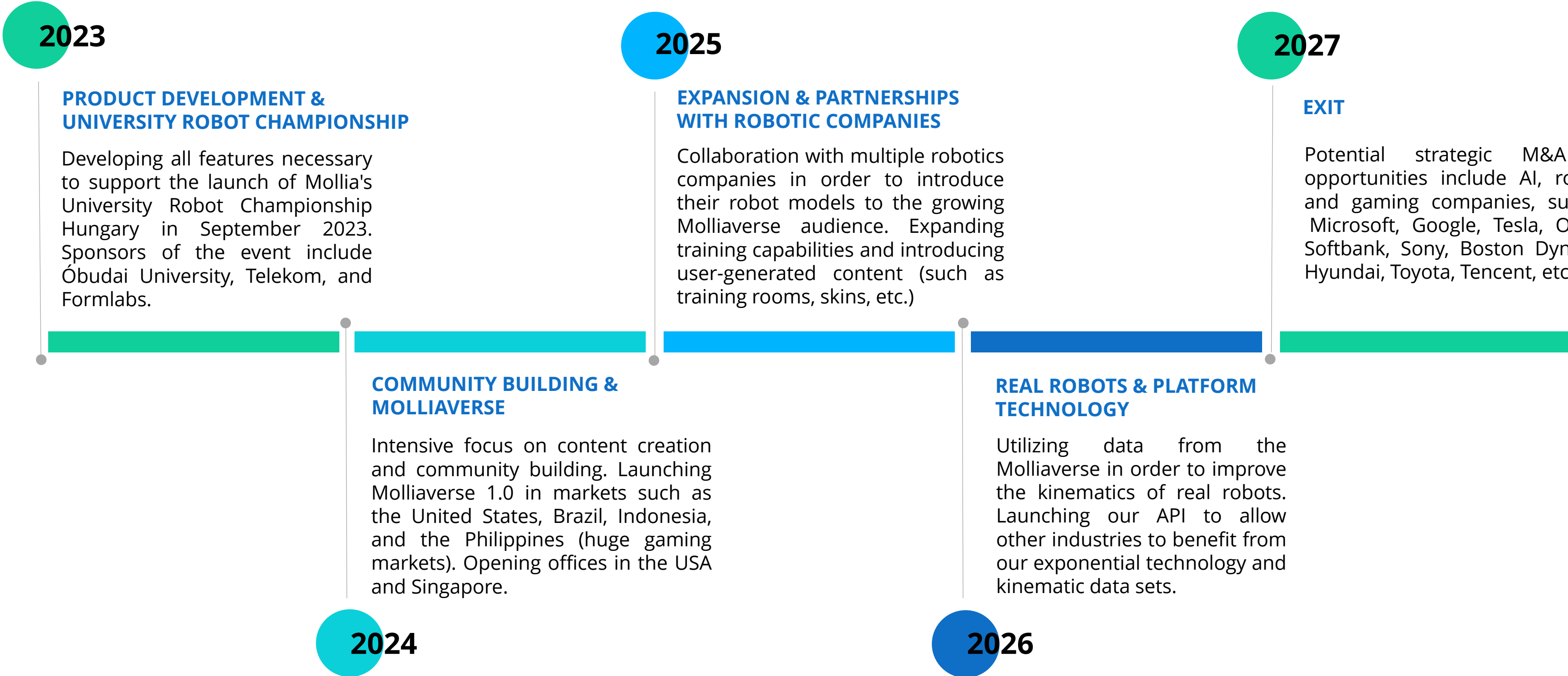
3D Printing Robots / USA



YOU?

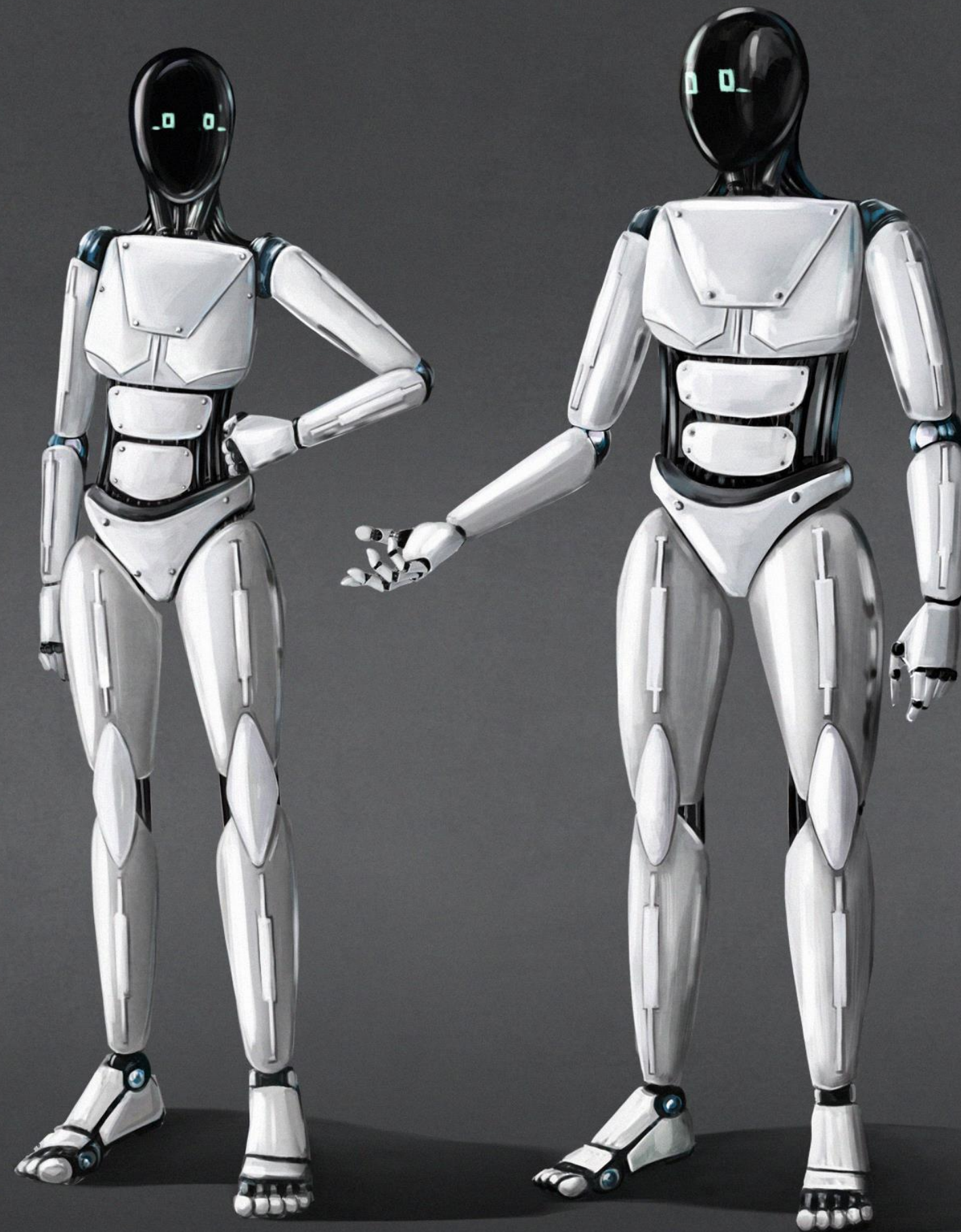
Let's build together!

DEVELOPMENT ROADMAP





LET'S MAKE **ROBOTS**
MOVE LIKE **HUMANS**



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