#### **IEEE Consumer Technology Society**





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#### Disclosure

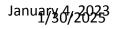
- Companies shown have no business relationships with me unless stated otherwise
- Comments made are views of me (Joseph Wei) and do not reflect IEEE



## Agenda

- Overview of 2025 CES
- Consumer Electronic Devices and Al
- Wearables at CES
- IoT Devices & at CES
- Interesting Tech
- AgeTech Innovations
- IEEE and Region 6 Key Events
- Q & A will be after Tom Coughlin's talk





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#### **CES Overview**





#### **CES Key Stats for Recent Years**

#### **2025 2024 2023 2022 2021 2020**

Attendees 141,000+ 138,000+ 115,000+ 40,000+ Virtual 170,000+

Exhibitors 4,500+ 4300+ 3200+ Virtual 4,500+

**Days** 4 4 4 3 4 4

Source: ChatGPT and CTA



## **Tips on joining CES**

- CES is a great way to networking with people in the tech industry and to learn first hand of technologies from large companies and startups.
- CES usually opens its registration **in September for one month with free exhibit pass** to Industry attendees, media and exhibitors. Past attendees receive an email with a code for free exhibit pass. Regular exhibit ticket price is \$149 \$350.
- Uber/Lyft/taxi are quite easy to get except a bit of a wait during the morning and at the end of the day.
- There are shuttle buses that transport attendees to various exhibit sites.
- Many free or by-invitation networking events each evening, research ahead of time for their times and locations.



## **Artificial Intelligence at CES**

- **CES 2024**: AI was predominantly showcased in software applications and smart devices, with initial explorations into robotics and automation.
- **CES 2025**: There was a significant shift towards "Physical AI," where AI systems were deeply embedded into autonomous machines and vehicles. NVIDIA's introduction of the Cosmos platform exemplified this trend, aiming to enhance the development of physical AI through synthetic data.



Source: Wekipedia

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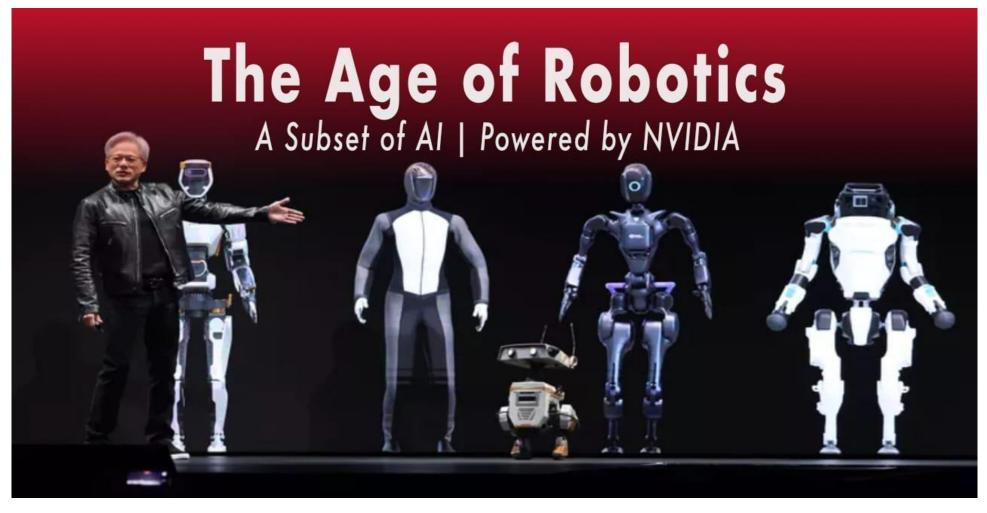
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#### **Consumer Electronics with AI in 2024**

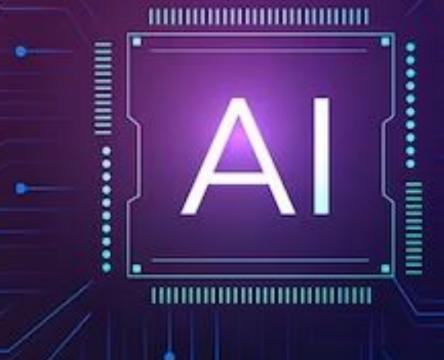




#### **Consumer Electronics with AI in 2025**







## Why Al is so important around the world?



#### **Economic Impact of AI around the World**



**CONSUMER TECHNOLOGY SOCIETY** 

## **Impacts of Artificial Intelligence**

#### Positives

- Significant contribution to global financials
- Greater user experience leads to productivity and efficiency improvement to both consumers and businesses
- Increased personalization with more precise predictive analytics

#### Negatives

- Jobs displacements by robots and automation
- Lack of ethical, privacy and security guardrails with improper use
- Amplify biases in the training data, algorithms, and improper implementation



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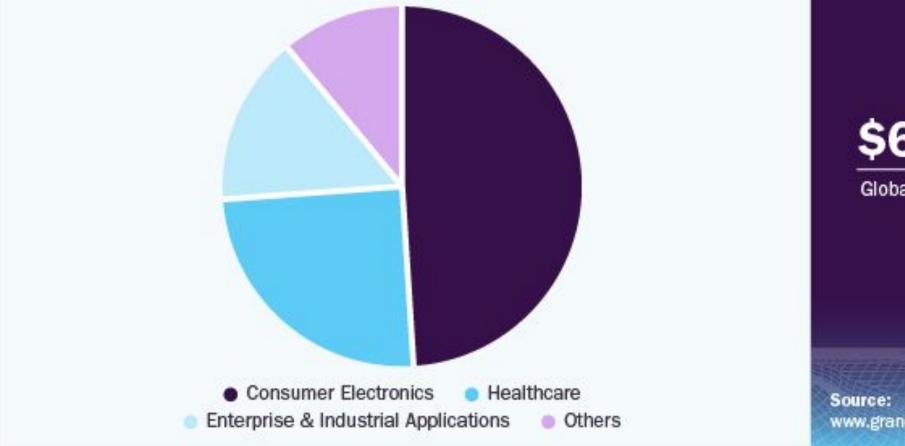




## **Global Wearable Technology Market**

#### **Global Wearable Technology Market**

share, by application, 2022 (%)



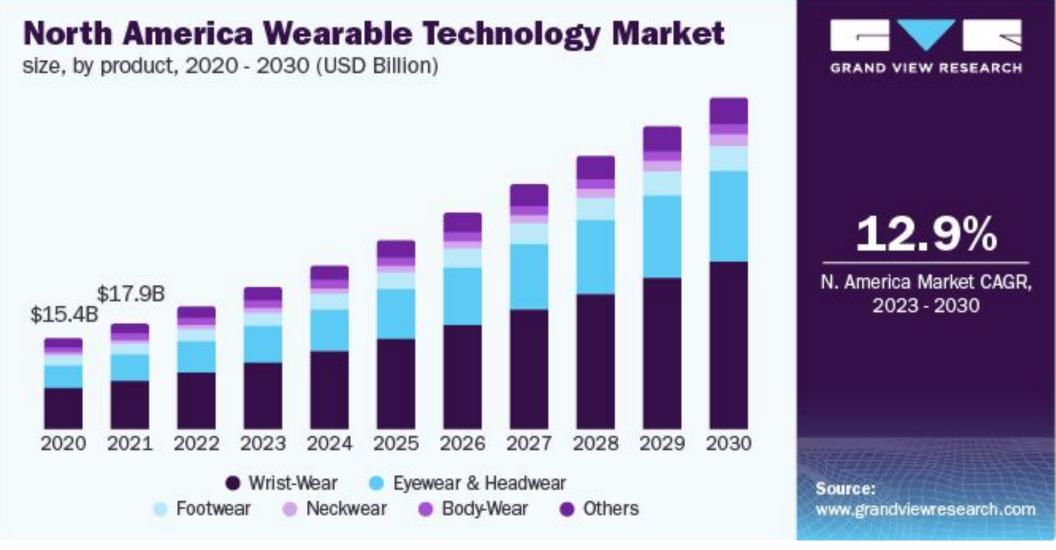




Global Market Size, 2022

Source: www.grandviewresearch.com

## North America Wearable Technology Market



#### Lunaring Smart ring for health monitoring





#### Loomos Al Glasses – 16MP Capture with GPT-40





#### **Everlight AR Smartglasses**





AR GLASSES WITHOUT COMPROMISE



High Brightness Sony Color OLED Display



Works Outdoor & Indoor

in all light conditions

As light as eyewear



Up to 8 hours of continuous use





3 DoF line of sight



60" Monocular Screen from 4 meters





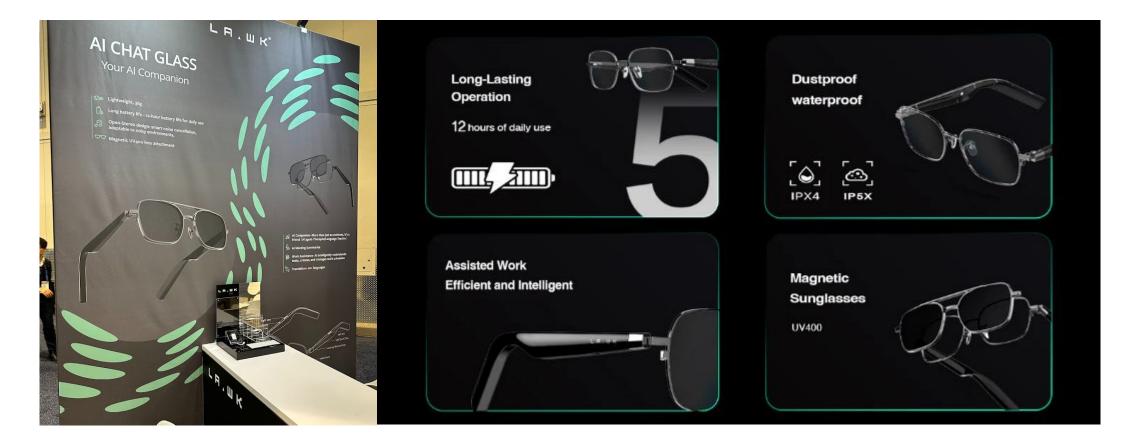


Wirelessly tethered to your iOS or Android Out of the box BETA Apps



1/30/2025

#### **Everlight AI Chat Smartglasses**



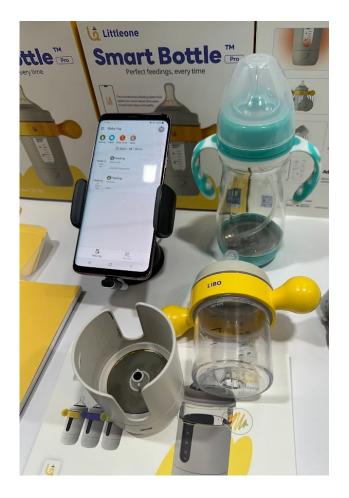


#### **Mudra Band for Gesture Control**





#### Littleone – Smart Bottle and Diaper Sensor





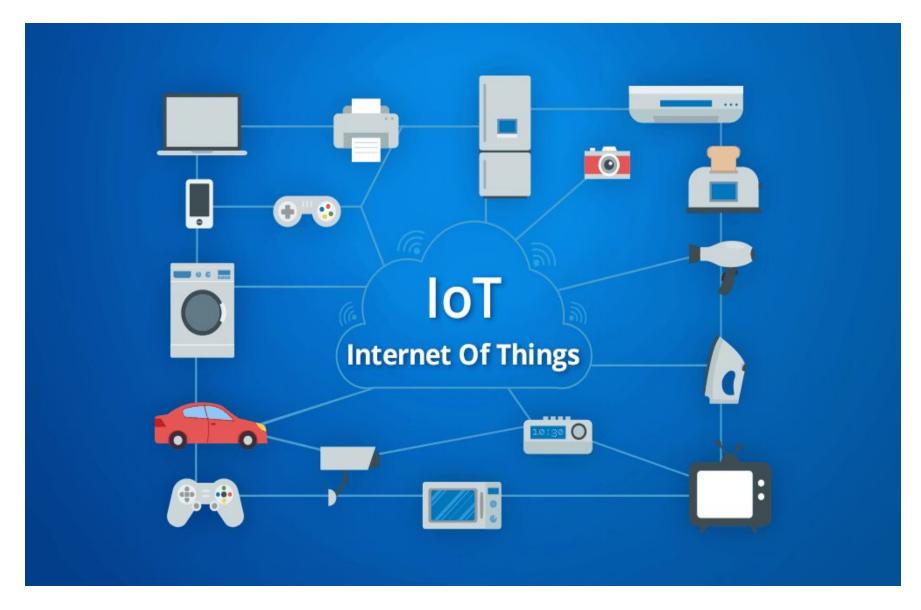


#### **Wearables for Pets**



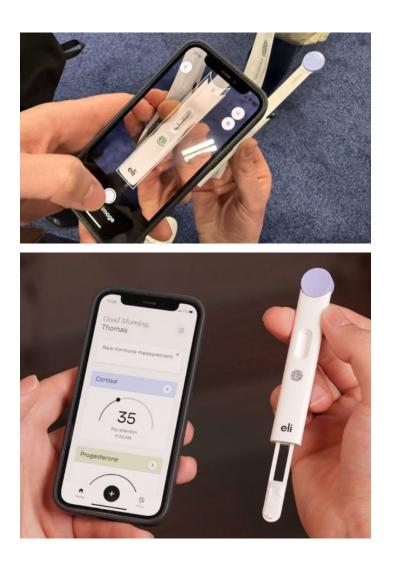








## Eli Health Hormometer for tracking hormone



- measure cortisol and progesterone from saliva
- The stick is placed in the mouth for 60 seconds, and shows a result in 20 minutes
- has plans to add testosterone and estradiol
- delivering results with over 90% accuracy.
- Subscription plans start at \$8 per test

https://eli.health/

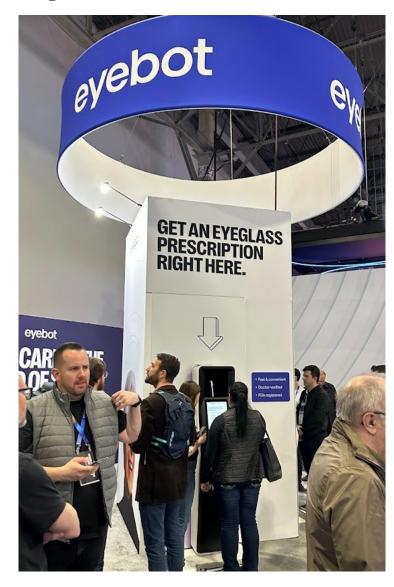


#### Tineco – Robotic cookware





#### **Eyebot for Glasses Prescription**







#### **Tombot – Companion robot dog**





INTERACTIVE SENSORS

Touch sensors all over the Puppy's body allows her to react to you based on how and where she is being touched.



VOICE COMMANDS

Voice activation software enables your Tombot Puppy to react to your commands. For example, if you tell her to "speak," she will bark for you!



**REAL PUPPY SOUNDS** 

Recordings from a 12 week-old Labrador puppy make your Tombot Puppy sound like the real deal!



RECHARGEABLE

Just like your smartphone, simply plug your Tombot Puppy in overnight and it should last all day.



SMARTPHONE APP

Tombot comes with a free smartphone app that allows you to name your Puppy, customize its functionality, and track user interactions on a dayto-day basis.

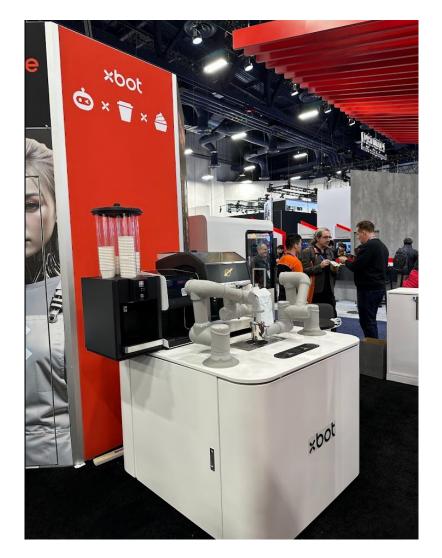


SOFTWARE UPDATES

As we continue to grow, so will your Tombot Puppy! We will add new actions and commands over time that can be easily updated through our smartphone app.



#### **Xbot Café – self serve robotic barista**





# Interesting Technologies

#### **Rictor Skyrider -**







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#### **Aptera Solar Power EV**





up to 40 mi

400 mi



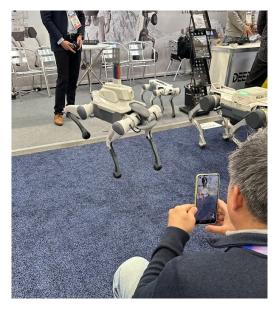


#### Robots w/AI – Enchanted Tools, Waiys, Tombot



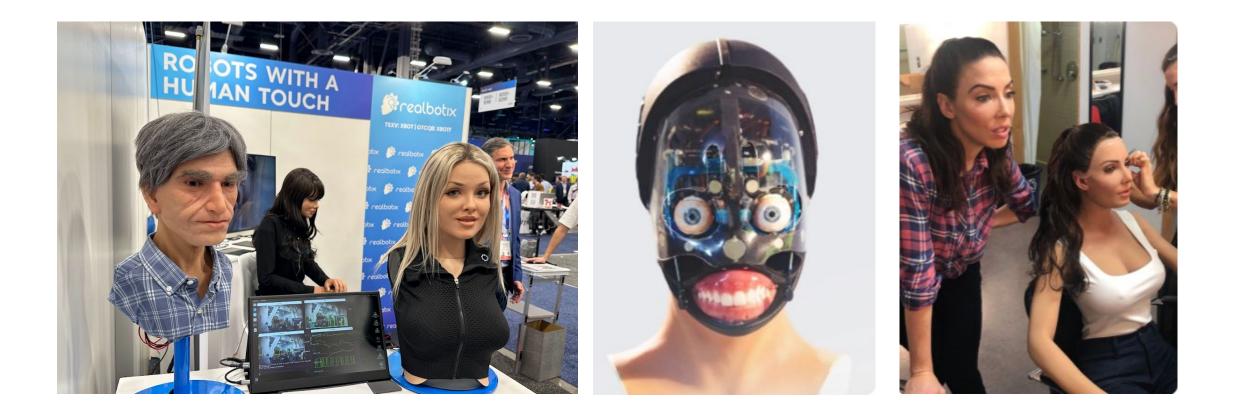








#### **Robotix robots with custom AI**





## **Xpeng Aeroht EV with Human Drone**

#### **Ground Module**

- Extended-range electric vehicle can provide continuous recharging for the air module
- 6x6 all-wheel drive and rear-wheel steering can provide enhanced capacity and off-road performance
- Equipped with an intelligent cockpit featuring 4-5 seats

#### Human-Piloted Air Module

- Electric vertical take-off and landing
- Distributed electric propulsion can meet single-point failure safety requirements
- Manual/autonomous dual driving modes
- 270<sup>e</sup> panoramic two-seater cockpit





#### Zero Freeze Portable AC Unit



22 lbs	5280 BTU	100~150 ft <sup>2</sup>	Cooling & Heating	Micro Compressor
Thermostat	Active Drain System	Dual Hose	()) 46 dB	(100V~240V AC



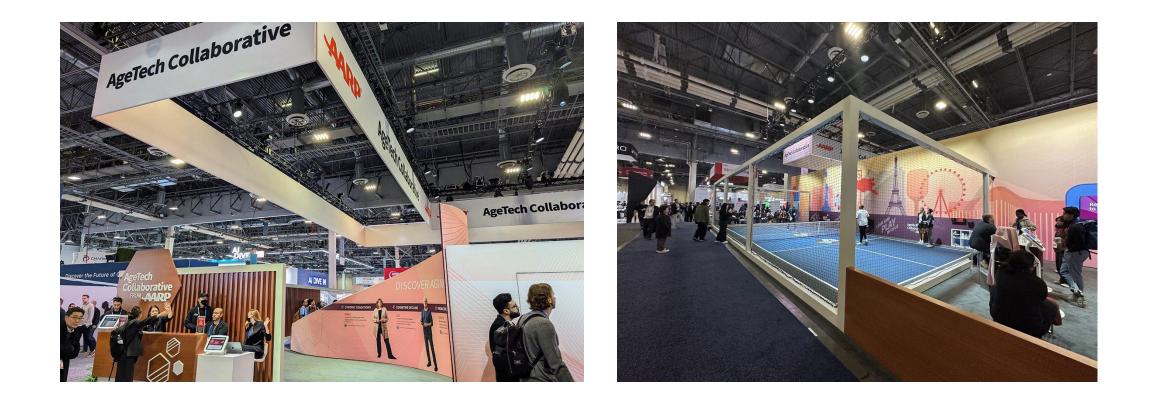








#### **AARP Agetech Collaborative**





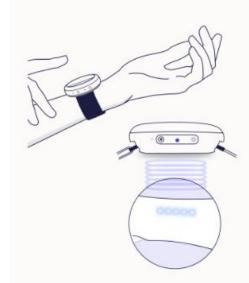
#### Wesper – FDA-cleared at-home sleep test





#### Embr wearable to warm up or cool down





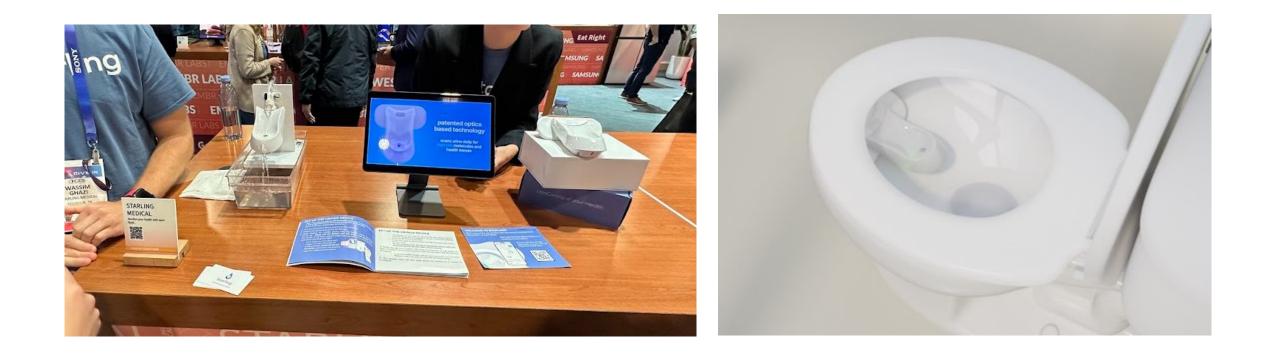
#### The Technology

Embr Wave uses a battery-powered thermoelectric heat pump that generates cool or warm sensations by moving heat away from or towards your skin.

These sensations stimulate the temperature-sensitive nerves on the inside of your wrist, triggering a natural mind-body connection that helps you rebalance your perception of temperature so you can feel better fast.



#### **Starling – screening urinary tract infections**





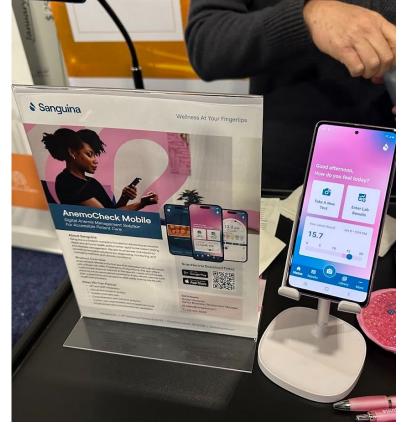
#### **AgeTech Atlanta**





#### **AgeTech Atlanta**







#### Anemocheck - Mobile App



#### **IEEE and Region 6 Conferences**



https://ieeeusa.org/public-policy/cvd/registration/

# IEEESusTech2025

TECHNOLOGIES THAT IMPROVE AIR, WATER, ENERGY, FOOD AND HUMAN LIFE





#### https://ieee-sustech.org/

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