



Consumer
Technology
Association

INSIDE CES® 2023

Trends & Health Tech Highlights





Introduction

Myriad transformations are reshaping society, technology, science and business. These changes are driven by entrepreneurs and new ideas that break from tradition. They provide us opportunities to improve how we live, better our planet and create a more equitable future for all. At CES, the sparks of possibility become reality, and each year we are presented with a peek at the future through the eyes of innovators. From startups in Eureka Park to some of the giants in their respective fields, CES is the place where dreams become real and innovation stands front and center. It is a showcase of what's possible today and an incubator for tomorrow. As we look ahead to the future, CES provides us with a glimpse at what can be achieved in the years to come.

Inside CES 2023: Trends and Gaming Highlights explores the cutting-edge trends that unfolded this past January. These trends are redefining what we know and expanding what we imagine is possible.

Creating impact with solutions that enhance the human experience

For the first time in its history, CES had an overarching theme: Human Security for All. CES partnered with the United Nations Trust Fund for Human Security and the World Academy of Art and Science on the Human Security for All (HS4A) global campaign to foster food security, access to healthcare, personal income, environmental protection, personal safety, community security and political freedom. Exhibitors and speakers embraced these ideas and helped redefine CES as a showcase for innovation empowering individuals, solving global challenges and making the world better.

Showcasing the building blocks of the metaverse and Web3

CES 2023 had a dedicated metaverse area displaying immersive technologies that are rewriting what it means to engage with digital worlds. The new Web3 Studio, produced by CoinDesk, welcomed industry pioneers to discuss the most influential trends emerging across industries, technologies, and capabilities.



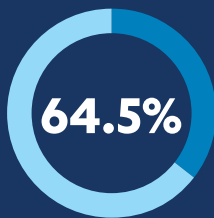
The Global Impact of CES® 2023



CES 2023 ATTENDANCE

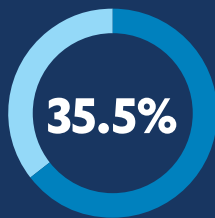
118K

Total Attendance



64.5%

Domestic



35.5%

International

151

Countries, Territories and Regions Represented

63%

of attendees have a significant buying influence for their organization

58%

of registered attendees are senior-level*

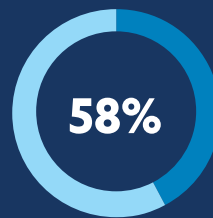
*President/Owner, C-level, VP, Director/Sr. Manager/General Manager



MEDIA ATTENDANCE AND COVERAGE

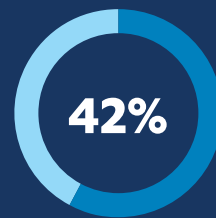
4815

Total Media Attendance



58%

Domestic



42%

International

221,180

Stories Produced



GLOBAL EXHIBITORS

3273

Total Exhibitors

1051

Startups



SOCIAL MEDIA

13.5B Global CES Reach on Twitter®

2.35B Exhibitor and CES Reach on Twitter®

309M Global CES Content Shown on TikTok®



CONFERENCE PROGRAMMING AND KEYNOTES

248

Conference Sessions

930

Speakers

All figures are pre-audited through January 31, 2023.

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“Sustainability is the buzzword on everyone’s lips.”

GARY SHAPIRO

President & CEO, CTA

Megatrends

Unlocking the Potential of Sustainable Innovation

From renewable energy sources to sustainable materials and manufacturing processes, companies used CES to showcase their sustainability initiatives and share best practices. Companies address the need to keep up with emerging sustainability trends and create products that meet consumer demands for greener technology.



Delta announced the launch of a first-of-its-kind airline innovation lab to accelerate research, design and testing for a more sustainable future of air travel. Delta Sustainable Skies Lab will feature ongoing work across Delta, inspire disruptive industry innovation and scale known tech and other actions to reach Delta’s goal of net zero emissions by 2050.



First time exhibitor **Goodyear** touted a concept tire that is made from 90% sustainable material including 17 sustainable ingredients such as bio-based carbon black, soybean oil and pine tree resins. Over 6 million metric tons of tire dust end up in waterways and the air every year, and tire dust is also one of the leading contributors to microplastics in oceans, so using

biobased ingredients should significantly improve the well-being of the world’s oceans.



Panasonic announced “Panasonic GREEN IMPACT,” a global commitment to reduce CO2 emissions from its businesses and supply chains. Panasonic showcased a concept tree composed entirely of perovskite solar cells that generate renewable energy, highlighted its work at its Kusatsu Plant — the world’s first factory to rely fully on renewable energy — and touted numerous mobility solutions like its cylindrical lithium-ion batteries for electric vehicles (EVs).



Schneider Electric unveiled Schneider Home, a first-of-its-kind home energy management solution. The solution includes a home battery for clean energy storage, a high-power solar inverter, a smart electrical panel, an EV charger and connected electric sockets and light switches that can all be controlled through a single interface for the first time. Through an easy-to-use app, consumers can automate energy production, storage, measurement and control, making homes efficient, resilient and sustainable.

Micromobility to Mass Mobility

By Land, Sea & Air

300-plus vehicle tech companies exhibited at CES 2023. This was the largest gathering of vehicle tech companies in the history of CES. The breadth of transportation related technologies on display, from semiconductors to sensors to electric bikes and Caterpillar trucks, makes CES the largest and most diverse transportation show in the world. Exhibit space in the West Hall of the Las Vegas Convention Center, which prominently features mobility-focused technologies, was sold out and many mobility-focused companies spilled into other areas of CES. Outside of the convention center, attendees could find large activations with real world demonstrations from companies like Luminar, VinFast, RYSE Aero, ASKA, AEye, Waymo, Volkswagen, Valeo, BMW, Forvia, Continental and Aptiv. CES included a wide range of mobility solutions, from personal transportation options to those redefining space travel for the future.



BMW revealed the i Vision Dee concept car. The vehicle is wrapped in 240 color-changing e-ink panels, enabling users to customize the look with up to 32 different color options through a swipe of an app. Additionally, the windows have incorporated mixed-reality tech, and the headlights and grill can change shape to produce different facial-like expressions for those wanting their vehicle to be a bit more emotionally attuned.

BRUNSWICK

Brunswick, the largest consumer marine company, showed off its electrified future. Brunswick's Mercury Marine power division introduced its Avator 7.5e electric outboard, the first in a series of electric outboard products that will be released this year. Brunswick



unveiled an entirely new brand at CES, called Veer, designed to support electric propulsion and appeal to the next generation of boaters. Finally, Brunswick presented Navico Group's Fathom e-power system — a lithium-ion power management platform with electric energy storage and distribution for onboard systems.



Stellantis stressed its goal to be the first company in its sector to have carbon net zero emissions by 2038. As Stellantis CEO Carlos Tavares noted, they are “all in,” with the ambitious goal of having 50% of all vehicles sold in the United States be battery electric by 2030, and 100% of vehicles sold in Europe by the same date. Tavares noted they expect to release 75 new battery EVs by the end of this decade.



French startup and Eureka Park exhibitor Up&Charge showed off technology that can wirelessly charge an EV via an in-ground charger in locations such as parking lots, shopping malls, and homes.



Finnish company **Verge Motorcycles** used CES to launch the U.S. production of its newest TS Ultra electric motorcycle with its integrated rim motor and reported peak 201 horsepower. The motorcycle can go 0 to 50 mph in 2.5 seconds and can hit a top speed of 124 mph.

Healthcare

- AI is taking center stage to raise awareness about health risks and conditions by analyzing inputs that include breathing, face color, speaking and coughing.
- Many smart products are addressing sleeping related issues, including teeth-grinding, snoring and bedsores.
- There are a growing number of technologies specifically calibrated to improve health outcomes and extend the resources available to medical professionals.

Technology has no nobler application than preserving and extending the quality of human life. While the most impactful technology contributions to healthcare include the development of breakthrough medications and treatments, end-user technologies are making vast leaps in helping consumers understand medical conditions and risks, as well as tools to ameliorate or compensate for disabilities.

Vivoo and Withings announced at-home urine tests that can indicate a wide range of health issues. Vivoo's offering tracks nine parameters that include hydration, ketones, oxidative stress and protein. In 90 seconds after testing, results are provided by a companion app that provides a wellness score on each parameter. Health insights may come from surprising sources. For example, Samsung, LG and others offer exercise and health-related programming via their smart TVs. Samsung showed how camera-equipped TVs may soon be able to measure vital signs such as heart rate, breaths per minute and blood oxygen saturation simply by analyzing small changes in facial color that accompany breathing via a feature called photoplethysmography. While fitness may improve by lifting weights, health insights may soon come simply from lifting a remote.

AI will have a pervasive impact on predicting a range of risks and conditions. At CES, Eureka Park exhibitor Seven Point One showed AlzWIN, which offers early detection for dementia and cognitive impairment simply by speaking to the device for two minutes. Linkerverse's HealthyVerse service can identify nutritional deficiencies via a nail imaging device and provide a personalized nutrition plan, while Algocare



NutriManager dispenses personalized nutrition supplements based on facial, voice and other data. Tokyo-based Suntory showed off Gutnote, an app that can check gut health by recording bowel sounds.

The LUXTEP foot balance monitoring mat measures the center of pressure, body weight imbalance and distance between feet to assess the level of falling risk and recommend corrections. And eMotiv's Star Ruckus can screen and treat ADHD in children through mobile games. Other companies are using respiratory functions for diagnosis. Opteev's ViraWarn is a palmsized COVID-19 breathalyzer, with results provided in 60 seconds. And WAYMED Cough is an app that uses AI to analyze breathing, coughing and voice input to help patients with COPD, asthma and pneumonia. South Korea-based iMediSync touted a headset that can perform an electroencephalogram (EEG) and detect potential risk factors for cognitive ailments such as Alzheimer's disease with the help of AI.

Sleep-related issues were a popular target for diagnostic and remedy products. Amazon's Halo Rise is a bedside device that measures sleep behavior without need for a wearable. The ANSSil Sleepinbody smart mattress collects body and sleep behavior data related to sleep patterns. Eureka Park startup SOVN has developed a smart hearable designed for treating issues stemming from excessive teeth grinding and clenching. The device uses small vibrations that nudge users to relax their jaw when it detects grinding or



clenching and monitors changes through its app. Motion Pillow takes a similar remedial approach to snoring via airbags that cause head position adjustments. Blisstech BEDSOREEM uses machine vision and AI to prevent bedsores by tracking a patient’s lying posture. Aimed at athletes, the ErgoSportive smart bed provides anti-snore and relaxation mode and USB ports. Its app reports sleep, recovery and health metrics and provides suggestions toward recovery. CES showcased many technologies designed to

improve health outcomes and expand the tools available to physicians. Showing off the promise of implantable technology for chronic pain sufferers, Abbott’s Proclaim Plus spinal cord stimulation system can change how the body perceives pain by sending mild electrical pulses to the nerves along the spinal cord. In response to the health detriments of social isolation, particularly in light of the current global pandemic and aging population, Crdl revealed a unique care instrument. It transforms the human body into a musical instrument and provides a sensorial experience that explores touch and sound. Medwand highlighted how its multi-sensor device can be used to address clinical staff shortage, improve remote monitoring and strengthen telemedicine options. Finally, Dassault Systemes’ “virtual twin” of the human heart can help medical professionals gain invaluable insight into cardiovascular diseases and simulate complex procedures to help optimize treatment outcomes.



Meet the Future of Digital Health at CES 2024

Digital Health at CES is where the healthcare and medical community converge to explore the role technology plays in advancing and reforming medicine, healthcare and consumer wellness.

Patients are taking control of their healthcare and wellness in ways that will change the economics of healthcare. Mobility is at the heart of the new digital ecosystem and it is creating a range of new business opportunities and services in the sectors that CES delivers.

CES is the best B2B2C venue for advancing strategic deal making, creating partnerships and gaining market share and mindshare in healthcare, domestically and globally.

CES 2023 By the Numbers

- **14K Industry attendees** listed Digital Health as one of their business interests.
- **64% of attendees** from the Health & Wellness Industry are Senior-level Executives.
- Attendees from **57 countries** expressed an interest in Digital Health.
- **424 Industry attendees** from Venture Capitalists, Private Equity, or Investing companies have an interest in the Health & Wellness industry.
- **279 Tier one media** listed Digital Health as one of their interest topics to cover.
- **33 Fortune 500** companies in the Health Care sector attended.

CES Digital Health audience includes:

- Medical professionals
- Digital health start-ups
- Healthcare and insurance providers
- Pharmacists
- Retailers
- Tech companies
- Investors
- Healthcare analysts
- Media

Past attendees include



Abbott



MERCK

UNITEDHEALTH GROUP[®]

Benefits

When you exhibit at CES, regardless of your exhibit size and location, you'll benefit from a suite of premium opportunities that include:

- Five complimentary exhibitor badges for every 100 square feet of exhibit space (minimum 10)
- Up to 1000 complimentary invitations for your customers and prospects
- Complimentary listings in the Exhibitor Directory
- Complimentary use of the Exhibitor Dashboard to generate promotions prior to the show
- Access to exclusive PR Newswire discounts and the CES pre-registered media list

About

Consumer
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As North America's largest technology trade association, CTA® is the tech sector. Our members are the world's leading innovators – from startups to global brands – helping support more than 18 million American jobs. CTA owns and produces CES® – the most influential tech event in the world.

If you are interested in exhibiting at CES 2024 and would like to have a sales team member contact you to discuss your interest, please contact us: 703-907-7645 or exhibit@CTA.tech.

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