

PIPE LINE

Radar, AI, Deepfakes and More

What happened at the T&S Forum?

Consumer technologists from across the globe gathered virtually May 3-6 to discuss CTA's work on industry standards at the 2021 Technology & Standards (T&S) Spring Forum. A host of new projects were launched, and informative panel sessions held, as CTA explored the subjects it will look at next.

Gesture control was a hot topic. Gestures make something happen with a specific body movement and it is an area ripe for best practices. A "gesture handbook" is under development by a new group formed by CTA's Technology Council. This gesture handbook will describe open air hand gestures for things like, accept/reject, up/down, left/right, forward/backward, increase/decrease, etc. across various use cases including XR (extended reality) and automotive.

Related to gesture control is consumer radar. Consumer radar refers to the use of low power/high frequency radio waves including touchless gesture controls, sleep tracking, sports/fitness tracking, home/office security and remote vital sign measurements. When integrating technology into applications, developers prefer to work with a standardized software interface — an application programming interface or API. CTA's Technology Council formed a group to create an API to define how consumer radar chips interact with their host devices.

The Technology Council also addressed interoperability between Ultra HD video sources and displays. It formed a group to consider a series of consumer facing naming conventions for common functions to provide consistency for end users. It might develop an implementation guide, too, that would result in a setup script through which sources and displays would negotiate for connectivity and optimum viewing arrangement.

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Technology & Standards Fall Forum
Sept. 20-23, 2021 | Digital Event

REGISTER: at cta.tech/Events. The CTA Fall Technology & Standards Forum, a digital event, will bring together engineers, product managers, CTOs and people from technology alliances to hear presentations, network, share information and develop standards.



T&S Forum panelists discuss the role of data in addressing public health emergencies.

SESSIONS OFFERED A GLIMPSE OF THE FUTURE

Future Standards for Digital Therapeutics covered the importance of common terms for digital therapeutics regarding what gets regulated and reimbursed, how the data produced by digital therapeutics can be leveraged to develop new standards, and how COVID-19 has accelerated the use of innovative health care technologies.

Mental Health and the Virtual Care Evolution discussed how technology can make private treatment easier, encouraging people afraid of stigma to get mental health treatment. It also covered how technology can help providers serve more people quickly, even 24 hours a day; and how technology helps patients more easily find doctors similar to them which improves patient outcomes.

Mitigating Bias Through Inclusive Design discussed best practices for avoiding bias in artificial intelligence (AI) systems. Strategies include making combating bias a corporate priority, making sure the team is diverse, and the data used to train an AI is relevant. For example, using the amount of money people spend on something as a proxy for their need for that item can lead to bias, because not everyone who needs it can afford it.

The Role of Data in Addressing Public Health Emergencies covered the importance of gathering accurate data and sharing it quickly when addressing a public health emergency. In a pandemic like COVID-19 one of the challenges is that systems that do not normally communicate must — for example, systems tracking inventories of personal protective equipment in stores communicating with hospital systems tracking these inventories.

Combating Deepfakes covered how technology can detect artifacts in content that indicate the content is fake, and how using AI to create deepfakes can outsmart deepfake detection efforts. Establishing and tracking media provenance is another way to combat deepfakes. There is a race between fakers and those trying to detect them, with each using the latest technology. However, sometimes there are legitimate reasons to create fake content, for example when producing fictitious movies.