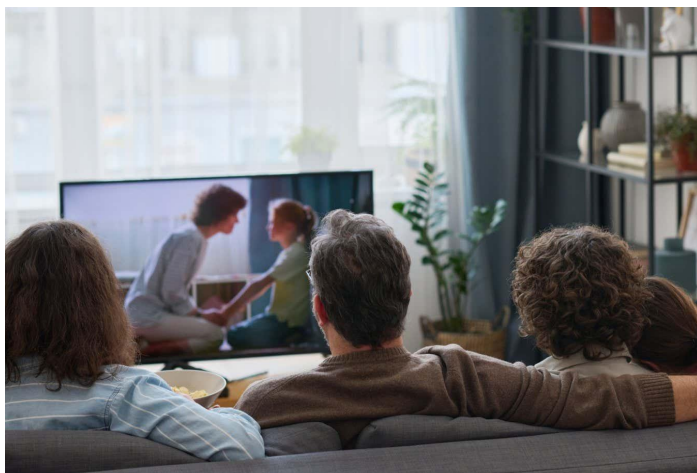


Smart TVs take snapshots of what you watch multiple times per second

Smart TVs from Samsung and LG take screenshots of what you are watching even when you are using them to display images from a connected laptop or video game console

By [Jeremy Hsu](#) on September 24, 2024



Smart TVs watch everything on the screen. Shutterstock

Popular smart TV models made by Samsung and LG can take multiple snapshots of what you are watching every second – even when they are being used as external displays for your laptop or video game console.

Smart TV manufacturers use these frequent screenshots, as well as audio recordings, in their automatic content recognition systems, which track viewing habits in order to target people with specific advertising. But researchers showed this tracking by some of the world's most popular smart TV brands – Samsung TVs can take screenshots every 500 milliseconds and LG TVs every 10 milliseconds – can occur when people least expect it.

“When a user connects their laptop via HDMI just to browse stuff on their laptop on a bigger screen by using the TV as a ‘dumb’ display, they are unsuspecting of their activity being screenshotted,” says [Yash Vekaria](#) at the University of California, Davis. Samsung and LG did not respond to a request for comment.

Vekaria and his colleagues connected smart TVs from Samsung and LG to their own computer server. Their server, which was equipped with software for analysing network traffic, acted as a middleman to see what visual snapshots or audio data the TVs were uploading.

They found the smart TVs did not appear to upload any screenshots or audio data when [streaming from Netflix](#) or other third-party apps, mirroring YouTube content streamed on a separate phone or laptop or when sitting idle. But the smart TVs did upload snapshots when showing broadcasts from the TV antenna or content from an HDMI-connected device.

The researchers also discovered country-specific differences when users streamed the free ad-supported TV channel provided by Samsung or LG platforms. Such user activities were uploaded when the TV was operating in the US but not in the UK.

By recording user activity even when it's coming from connected laptops, smart TVs might capture sensitive data, says Vekaria. For example, it might record if people are browsing for baby products or other personal items.

Customers can opt out of such tracking for Samsung and LG TVs. But the process requires customers to either enable or disable between six and 11 different options in the TV settings.

"This is the sort of privacy-intrusive technology that should require people to opt into sharing their data with clear language explaining exactly what they're agreeing to, not baked into initial setup agreements that people tend to speed through," says [Thorin Klosowski](#) at the Electronic Frontier Foundation, a digital privacy non-profit based in California.

Reference

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