

DUMB GUIDE TO SMART TVs

WATCH YOUR TV BEFORE IT WATCHES YOU

Juno Jense

Lightning Lightning Talk FOSDEM 2026

DEFAULT SET-UP

- Spend €500-2500+ on a new TV with integrated smart features

YOUR REWARD

- Unified platform for all media, voice control, screen casting etc.

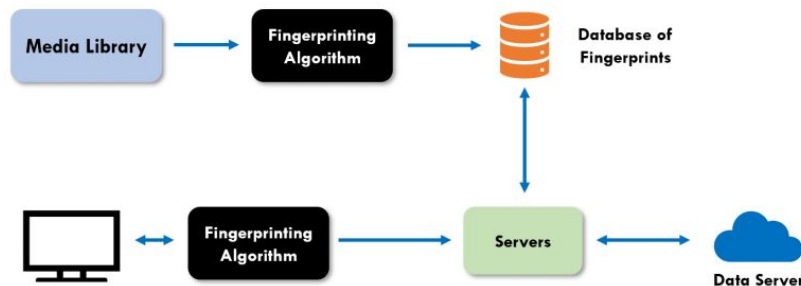
THE PRICE YOU ARE PAYING

- Ads on your homescreen
- Bloatware
- Manufacturer does a funny thing called ACR
- The Netflix Button
- Probably your soul too

AUTOMATIC CONTENT RECOGNITION

- Take a very low-quality screenshot 2 to 100 times a second
- It DOES NOT matter what you are watching

First, a database of fingerprints is generated using either audio or video fingerprinting.



Later, an ACR-enabled device (SmartTV for example), generates fingerprints of content that is being played which are compared with the database to recognize content.

(Image taken from OTTVERSE)

THE NETFLIX BUTTON





The Horror

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- Avoid account logins
- Disable automatic updates
- Disable ACR features
- Disable personalised advertising
- Disable voice assistants and microphones
- Turn off camera access (or physically cover it, if present)
- Disable “content recommendations” and “trending” rows
- Disable diagnostics, usage stats, and “experience improvement” programs
- Turn off cross-device tracking / “smart device linking”
- Disable app-specific auto-updates
- Remove or hide preinstalled apps you won't use
- Set “power on to last HDMI input” (avoid ad home screen)
- Turn off Bluetooth if you don't use it
- Disable Wifi after setup if using wired HDMI devices only
- Block the TV at the router (DNS or firewall) after updates
- Opt out of interest-based ads in every menu that offers it
- Decline “partner content”, “enhanced recommendations”, and “third-party sharing”

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- **The worst of all... checking privacy settings again after every firmware update (they often reset)**

TEMPORARY SOLUTION #1

- Buy an older TV
- This works great until older TVs are also smart

TEMPORARY SOLUTION #2

- Monitor with a small form factor computer
- This works great until you visit friends or family that do not have the care or technical know-how to run a similar set-up

REAL SOLUTION

- Defeat Capitalism

REALISTIC SOLUTION #1

- Do not connect the TV to the internet
- This works great until manufacturers start requiring internet or a subscription for the TV to work at all (hardware-as-a-service)
 - Similar issues with printer ink, 'smart' cars, home security

REALISTIC SOLUTION #2

- Hack your TV
 - SamyGO for Samsung
 - Custom Android ROMs to replace GoogleTV
 - RootMyTV or OpenLGTv for LG
 - ...build your own hack!



IT'S!! TV!! TIME!!!