## How Signal Processing Affects Our Daily Lives

Signal processing touches our daily lives in more ways than we realize. There are countless applications and devices that utilize signal processing to make our technologies work.



The IEEE Signal Processing Society, established in 1989, has roots in the IRE Audio Group, founded in 1948.

Signal Processing Society



It helps mine data from social networking feeds, enabling you to discover trending topics and share

It analyzes audio signals, allowing you to hear the vibrations of a potato-chip bag through sound-proof glass

15 feet away.



Rapidly evolving areas of biometric recognition include measuring hand geometry, signatures, facial expressions, and vein and ear shape, thanks to signal processing.

Signal processing

enables the transistor

radio, the most popular communication device in

history, to be produced.



Signal processing is vital for the technology behind the 3 million hearing aids sold

annually in the U.S.

The sound quality of video streaming websites, smart phones and gaming devices has improved because of signal processing.





Digital signal
processing improves the
image quality and resolution in
important medical imaging
technologies like x-rays, CT scans and
MRIs while reducing the power of the
illuminating signal.



Signal processing helps remove background noise, increase audio quality and make way for voice recognition technology.

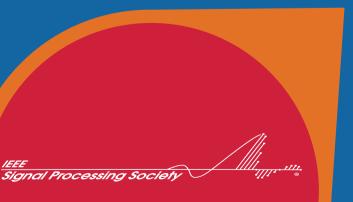






The FAA estimates as many as **7,500** small commercial drones, which utilize signal processing, could be operational





Want to learn more about the science behind our digital lives? Visit signalprocessingsociety.org Signal processing helps measure earthquakes, detects tsunamis and over the past two years, has helped locate missing planes.



In 2032 and beyond, companies like Facebook will have brain-computer interface engineers to create a "communications platform of the future" using

signal

processing.

