

<b>Name</b>	Isao Echizen, Professor	<b>Location</b>	NII	<b>Research Field</b>	Multimedia, Information Security, Privacy Protection
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We are working on a wide range of research fields from basic theory to applied systems, while focusing on the integrated area of multimedia and information security, that of multimedia and privacy protection.

Laboratory URL: <http://research.nii.ac.jp/~iechizen/official/index-e.html>

**Main research themes:**

**Biometric identity theft prevention**

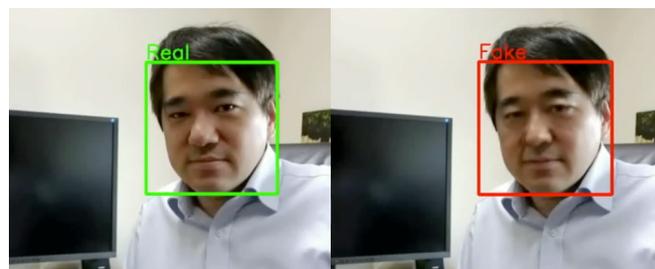
It has been pointed out that the diffusion of high-performance cameras and microphones in society enable another person's biometric information to be acquired through remote capturing and shared in cyber space. This research establishes a technical platform for enabling control over the acquisition of personal biometric information and distribution of that information in cyber space based on that person's wishes.



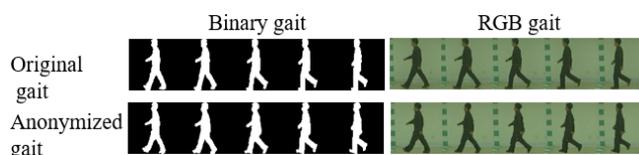
PrivacyVisor® protecting against facial detection and BiometricJammer preventing fingerprint capture

**Biometric spoofing and anti-spoofing**

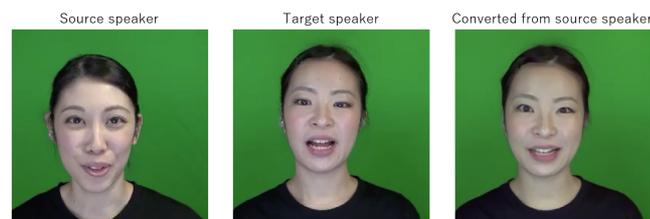
There are concerns that the diffusion of cameras, microphones, and other types of sensors in society can lead to invasions of privacy through chaotic sharing in the virtual world of face, voice, and gait obtained in the real world. In addition, advances in multimedia processing are making it possible to impersonate (spoof) just about any real-world person in the virtual world. This research establishes a platform for protecting and using multimedia information that provides biometric (anti-)spoofing and anonymizes biometric information.



Fake video detection



Gait anonymization using GAN



Audiovisual speaker transformation

In addition to the above, we are also engaged in research on fundamental technologies and system technologies related to information security and privacy protection.

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