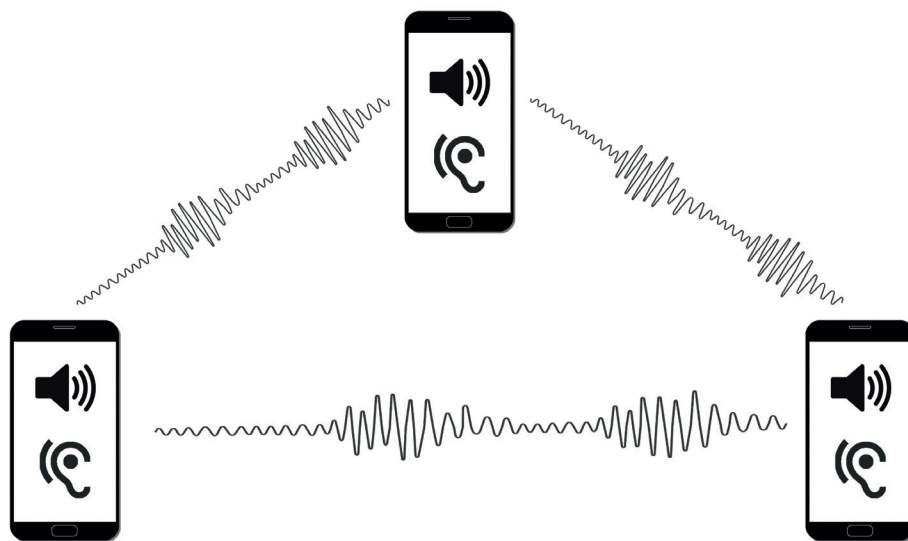


SONITALK

an open ultrasonic communication protocol

Ultrasonic device communications use the microphone and the loudspeaker e.g. of a smartphone to transmit data over the air. Usually very high frequencies (above human hearing range) are used as carrier frequencies. To date there are only chargeable & proprietary solutions on the market which partly raise questions about the privacy protection. An open and transparent protocol is still missing. Furthermore existing solutions are not compatible and interfere with each other.



SoniTalk aims at the development of an open and transparent protocol for ultrasonic communication between devices such as smartphones, TVs, and IoT devices. It gives the user full control over her privacy. Thereby, SoniTalk establishes the foundation for innovative applications and services, such as secure authentication, mobile payments, smart home control, mobile money transfer, second screen services, location- and proximity-based services, near-field peer-to-peer communication, and ad-hoc mesh networking. SoniTalk has the potential to become an open standard in ultrasonic communication that provides full protection of privacy and that enables many novel use cases and applications.



sonitalk.fhstp.ac.at