The connected protected worker at the age of IoT

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1. Abstract
At this age of Internet of Things (IoT), wearables are now everywhere, sometimes even in your earcanal. The research team from the NSERC-EERS Industrial Research Chair in In-Ear Technologies (CRITIAS) has been actively developing various in-ear technologies designed to complement the human ear, from "smart" hearing protection against industrial noises, to advanced inter-individual communication systems, to hearing health monitoring devices using otoacoustic emission (OAE), to in-ear EEG Brain Computer Interface (BCI). More fundamental research has also been conducted, particularly on the micro-harvesting of electrical power from inside the earcanal to power future auditory wearables. Current state of the research conducted within CRITIAS is presented in this –hopefully– exhaustive pie chart representing possible in-ear technologies.

2. Developed tools

3. Latest references


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