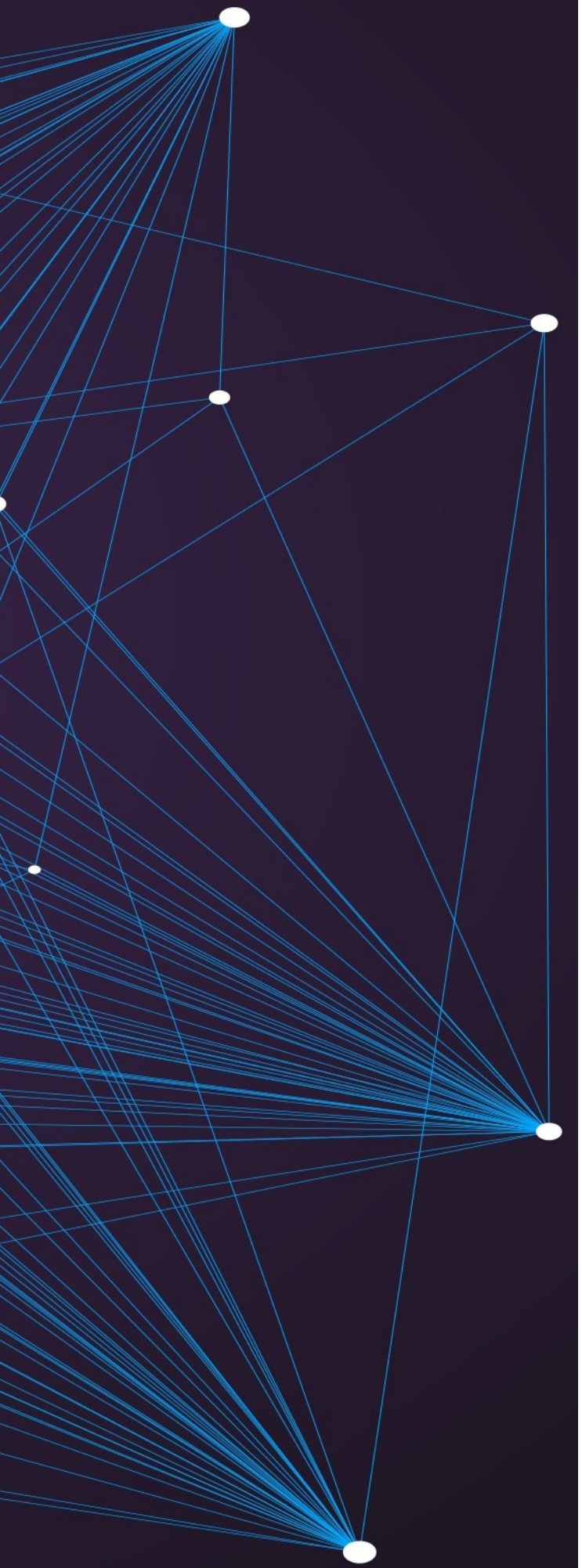


ACETT

Auditory Communication Enhancement Through Touch

SEED/0719(B)/0090

The Project ACETT SEED/0719(B)/0090 is co-financed by the European Regional Development Fund and the Republic of Cyprus through the Research and Innovation Foundation.

What?

Through project ACETT, IREROBOT aims to develop and enter the market with a product based on a novel communication method that uses the sense of touch, by **converting sounds to vibrations** that are transmitted to the skin through a unique interface.

Why?

The main challenge addressed is to **provide access to sounds to deaf people so that they can experience 'hearing' and communicate without relying solely on either lipreading or sign language,** which present their own drawbacks. ACETT addresses a community of half a billion people with a hearing disability, enabling immersion in the world of sounds through the sense of touch therefore reducing social distancing and isolation.

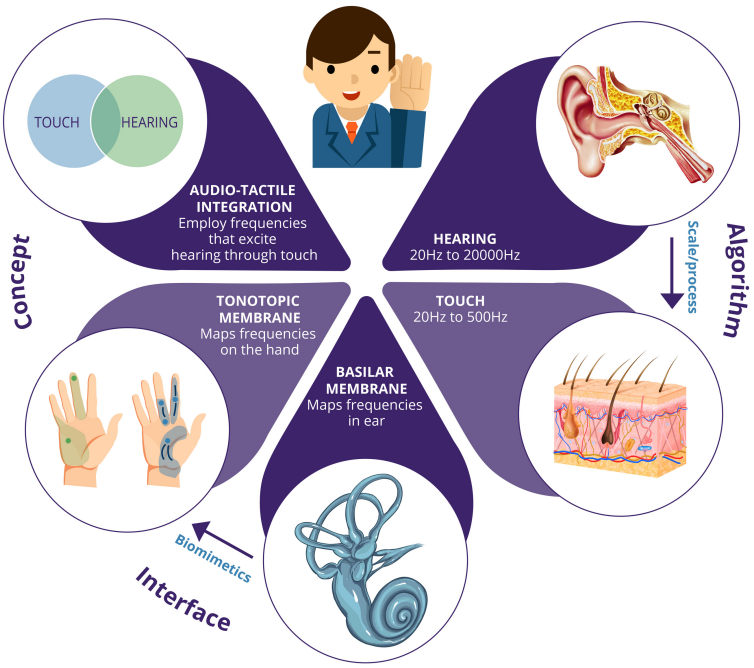
How?

The innovative solution being developed is based on a **vibrotactile interface communication system** using sensors and an interface which will connect the device to the skin of the person suffering from hearing impairment. The method developed by IREROBOT essentially **measures sound signals, processes, and transforms them, and finally delivers the vibrations to the skin.**

Specific Objectives

- Development of prototype up to Technological Readiness Level 7/8
- Development of optimal product outlook and ergonomics by recruiting potential customers and users in the design process (User-Driven-Design).
- Implementation of a solid market and communication strategy that will enable market penetration through a B2B business model.
- Reach company growth and sustainability through building of lasting connections to industry and recruitment of new company members.

SOLUTION



IREROBOT

IREROBOT LTD is a research and development firm that aims to generate interactive technologies which have a positive effect in people's lives. Rehabilitation robotics, medical technologies and sensory interfaces are the current topics of focus of IREROBOT. Our vision is to achieve a significant impact towards rendering human-machine interaction technologies more physical and comfortable and contribute to the betterment of cyber-physical experience through a more technologically inclusive world.

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