

Partners:

**Imperial College  
London**



**The University of  
Nottingham**

UNITED KINGDOM · CHINA · MALAYSIA



**ReSound**  
rediscover hearing



 This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 644051

**3D  
Tune-In**

Contact us:

Project Coordinator: Dr. Lorenzo Picinali  
Email: [l.picinali@imperial.ac.uk](mailto:l.picinali@imperial.ac.uk)

Dyson School of Design Engineering  
Imperial College London  
10 Prince's Gardens  
South Kensington  
London SW7 2AZ  
Tel: **0044 (0)20 7594 8158**

<http://www.3d-tune-in.eu/>



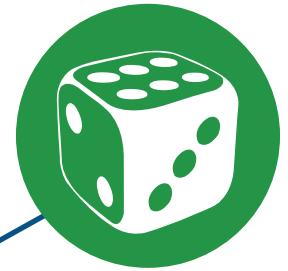
**3D  
Tune-In**



Hearing loss is an inevitable part of the ageing process from around 25-30 years old. As the average age of Europe's population is increasing, with expectations by 2050 of two fifths being over 50 years old, demand for assistive hearing devices is also expected to grow.

Hearing Aid (HA) technology has dramatically advanced in the last 25 years, since the commercialization of the first digital hearing aid. Nevertheless, this technological advancement is not always accessible or accessed by the hearing impaired population. The majority of individuals with hearing aids use the device as if it was a standard analogue hearing aid, i.e. only for its amplification and equalisation features, and new algorithms are under-used or not exploited to their full potential.

Hearing impairment in older adults can lead to frustration, low esteem, withdrawal and can affect social inclusion. Further to these, in children, hearing loss may affect speech and language development which can impact academic achievement and future vocational choices.



## Our goal

The goal of 3D Tune-In is to understand the issues of hearing loss and facilitate the successful exploitation of existing, overlooked or neglected functionalities of hearing devices through the novel use of 3D gaming technologies.

## How

3D Tune-In brings together the relevant stakeholders from traditional gaming industries (Reactify, Vianet, XTeam, Nerlaska Studio); academic institutes (Imperial College London, De Montfort University, the University of Nottingham, the University of Malaga); a large European hearing aid manufacturer (GN Hearing); and hearing communities (through Associations – Extra Care, Hearing Link, Action Deafness, Accesibilidad y Personas Sordas and Ente Nazionale Sordi) to create a novel 3D toolkit and games tailored to different target groups.

## Expected impact

The impact of 3D Tune-In is potentially wide ranging for economic and societal benefits. It is intended to open up new markets for the traditional game industry and 3D technologies. More importantly, 3D Tune-In hopes to greatly improve people's quality of life, and their interactions with other people and their surrounding environment, while increasing public awareness of the challenges of hearing loss.

