

Real-time audio processing for an augmented headphone experience

Keywords

Augmented reality
sound system

Interactive audio
on the move

Recommendation
Systems

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DESCRIPTION

- The technology automatically analyzes the user's sound environment in real time to predict the components potentially of interest to him/her in order to reproduce them in an augmented and controlled manner.
- Advanced machine listening techniques robust to noisy environments, implemented on an embedded system with strict computational constraints
- A recommendation engine aiming at automatically creating a personalised sound track, mixing media content and surrounding environment sounds, which meets the user's expectations. should be played to the user.

COMPETITIVE ADVANTAGE

- The ability to achieve automatically a dynamic and selective noise reduction.
- The ability to highlight a particular component in a sound scene with a loud background.
- The technology can be embedded in mobile devices.

APPLICATIONS

- Smart audio headphone
- DJs, concerts
- Phone communication, open office, noisy work sites
- Sports and Cultural events, shows, exhibition

DEVELOPMENT STAGE

- TRL 5

INTELLECTUAL PROPERTY

- 2 french patent applications (in 2016 and 2017) and PCT application (2017)
- Software deposit to the Agency for the Protection of Programs in 2017