Acoustic Trail

First GPS eyes-off for mountain runners
Spanish Mountain Tourism Cluster

- Born in Spain in 2013

- Key points
  - Mature and fragmented sector
  - Need to reinvent the offer
  - Differentiation and competitiveness based on innovation.

- Working groups
  - Safety
  - Commercialization
  - Sustainability
  - Tourism product innovation
Innovative satellite navigation

**Navigation based on senses**
Helping people to navigate in the outdoors by using haptic and acoustic stimulus

**Collaborative navigation**
Sharing people position for don't loose anyone and don't get lost
Increasing number of people practicing mountain sports, resulting into more incidents and accidents.

Users professional assistance in the mountains, like search and rescue activities, is complex and expensive.

Companies and institutions organizing need new solutions for reducing mountain risks.
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Innovation

+ Adventure

+ Safety

Acoustic Trail

Safe Mountain

MONTAÑAS DE INNOVACIÓN
Cluster de Turismo de Montaña
SPAIN

acousticTRAIL

La Besurta 450,2 km
Nuevo Seleccionar

Mapa
What does user need?

To know the track
Navigate without getting lost
Keep the eye on the trail
Don't stop for consulting maps or GPS
How can I perceive the track if I have to keep my eyes on the trail?
Where do the sounds come from?

ILD (Sombra acústica)

ITD (Diferencia de Tiempo)
Binaural sounds technologies

ITD
(Diferencia de Tiempo)

ILD
(Sombra acústica)

FIG.6B.
Acoustic Augmented Reality
Acoustic Trail is an Android smartphone application based on GPS and 3D sounds.

It supports mountain runners by guiding them along a specific track, without taking eyes off the trail.
Start here

Acoustic Trail

Montañas de Innovación
Cluster de Turismo de Montaña
Spain

Seleccin una ruta

Seledccionar
Navegar
Ir a...
Rumbo

Inicio
Brujula
Bearing navigation
Track navigation
Go-To Point Navigation

1. Select a point on the map.
2. Navigate to the selected point.
3. View the profile and distance information.
4. Download the application for offline navigation.
Next steps

End user tests and validation
Other smartphones platforms
Extend application to other areas
Wearable

All the world in 0.2 cm²
Acoustic Trail

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