

'Accessible Christmas,' an application that allows blind people to enjoy Christmas lights

December 10 2020



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The Human Language and Accessibility Technologies (HULAT) research group at the Universidad Carlos III de Madrid (UC3M) has developed and validated a mobile application that allows people with visual impairments to enjoy Christmas lights in the city of Madrid.

The free Accessible Christmas app is available for Android and iOS and uses a system of audio descriptions assigned to different streets which tells you what you are looking at each time. It starts to work automatically when the user activates the app's geolocation system. Once the system is activated, the audio description plays, sharing information about the scenes represented in the lights, colors, and the feelings transmitted, as well as additional information about how it was created.

In addition to this, the application allows you to enjoy the Madrid Christmas lights without being there just by searching through the list of available streets. Each of them gives a description of the lights in this area and its representative image.

The Accessible Christmas tour is made up of twenty spots that can be visited, including the Puerta del Sol, Plaza Mayor, and Plaza de Canalejas, and offers three audio description formats; one that uses real voices, one with synthetic voices, and one that uses adapted language for younger audiences.

Ultimately, the goal of Accessible Christmas is to allow everyone to enjoy the Christmas atmosphere in Madrid.

This system has been developed by teaching and research staff in the HULAT research group, which belongs to the UC3M's Computer Science and Engineering Department, whose main activity consists of carrying out R&D&I projects related to natural language processing technologies, [information retrieval](#) and extraction in several application domains, search of answers systems, usability, and accessibility of user interfaces.

More information: iOS: [apps.apple.com/es/app/navidad- ... cesible/id1539275107](https://apps.apple.com/es/app/navidad-accessible/id1539275107)

Android: [play.google.com/store/apps/det ... avidadAccesibleHULAT](https://play.google.com/store/apps/details?id=com.avidadAccesibleHULAT)

Provided by Carlos III University of Madrid

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