**Daniel:**

Hey guys, we’re team 14 and we’re developing an assistive navigation system for blind people.

**Jason:**

I’d like to invite you guys to close your eyes for a moment. Assuming you have and you cannot see me, it’s likely you still know where I am in the room. You can hear me as I walk from one side of the stage here to the other. What you’re using right now is called echolocation and it’s one of the main ways that people without sight can navigate.

**Paulo:**

The problem is, is that once *Jason* stops speaking, you don’t know where he is anymore. He could have stopped moving … he could be standing behind you right now. This doesn’t just apply to people, but also things like, walls, doors, stairs, and vehicles.

**Jason:**

I’m over here by the way… you can open your eyes now.

**Raj:**

Our Spatial Echolocation Enhancement System will use a depth sensing camera attached to a headset worn by the user. This camera will record information about the user’s environment and relay it back to the user through a pair of headphones using Binaurally spatialized audio cues.

**Adalberto:**

Binaural audio is a unique type of audio that when listened to with an ordinary set of headphones, sounds like its coming from a location outside of the listener’s head. This means that we can generate audio cues in any point in space around the user and the user will be able to locate it exactly the same way you can locate us as we speak up on the stage here.

**Daniel:**

Besides the headset sensor, all of this can be driven by something as simple as a mobile phone and a regular pair of headphones. We have already begun testing the system out using a simulated prototype system, and we feel that the project holds great potential for changing how blind people navigate.