Orientation Gadget for Visually Impaired

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For every sighted person it is easy to use public transport. But there are challenges for blind and visually impaired people like finding the entrance into the public transport as a vital problem, as shown by a survey. Therefore we generated the research question, how are we able simplifying the access to public transport for blind and visually impaired - more precisely how the entrance can be found. We modeled and reviewed different solution statements. The best of the ranking (economical, fast, compact and light) is built now. This system uses the analog signal of sound produced by the railroad, which is recorded during the railroads arrival, then technically treated so that the visually impaired assisted reaching the entrance easily. Initially we restrain to the application at the railroad in the metropolitan area of Hamburg (northern Germany). In addition to concept development we did measurements in cooperation we the Hamburg railroad company in real terms for validation. We can already say that our system, as simple the hardware is, works very well for the considered problem because of intelligent signal processing and evaluation.

Awards Won:
Third Award of $1,000