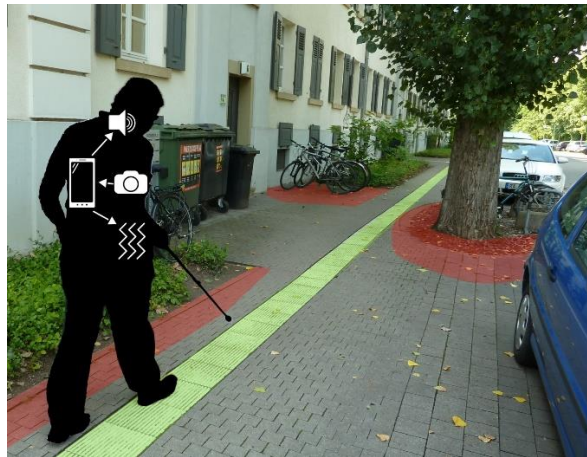


***Hiwi-Jobs, Bachelor/Master Thesis:*****Navigation Systems for the Visually Impaired**

In cooperation with the Study Center for the Visually Impaired (SZS)



Assisting visually impaired people to safely navigate and explore urban areas is an essential task when aiming towards an increase in their autonomy, mobility, and overall life quality. While existing consumer GPS systems deliver accurate location and directionality information for points of interest, they are blind with respect to the user's immediate surroundings. Hence, we require complementary systems to perceive the surroundings, in order to: guide the user around potential obstacles, warn him of dangers in his path, inform him about interesting spots, locate doors and buildings, cross busy intersections, and many more possible scenarios.

***Tasks/Requirements***

- develop and implement state-of-the-art computer vision algorithms (*such as C++, Matlab, Python, OpenCV, ...*)
- opportunity to work with large image/video data sets
- (ideal but not necessary) prior knowledge and/or experience with computer vision (*CV:HCI lectures, seminars, practical courses, ...*)

***Contact***

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