



WICHITA STATE  
UNIVERSITY

COLLEGE OF ENGINEERING

Department of  
Electrical Engineering  
and Computer Science

## Consent Form

**Purpose:** You are invited to participate in a research study a smartphone-based application that helps with navigation in indoor spaces. We hope to learn how effective this application is in guiding users from one point to another in large indoor spaces, and what further improvements are needed before it can be provided as a service to the blind, visually impaired, and even to the general sighted population.

**Participant Selection:** You were selected as a possible participant in this study because you fall into one of the four categories of participants (based on degree of vision) we wanted to study. Approximately 15 participants will be invited to join the study.

**Explanation of Procedures:** If you decide to participate, you will be asked to visit one or both test locations (WSU and/or Envision), hold a smartphone and walk to a pre-determined location with or without our smartphone application running. At each location, the test should not take more than 30 minutes to complete. The tests will be run at WSU initially; upon satisfactory outcomes a similar exercise will be conducted at Envision. At the end you will be asked to rate, on a scale of 1 to 10, (i) the perceived effectiveness of the proposed system in helping you navigate, and (ii) your experience interacting with the user interface on the phone. Some users will be used as part of a control group to navigate to the intended destination without the application's help.

**Discomfort/Risks:** There should be no discomfort in holding the smartphone and following navigational instructions. There is some risk of bumping into objects or walls, stumbling while navigating, but should be no more than what you would typically encounter in navigating indoor spaces. The application may be erroneous in providing instructions, so use the typical judgment you would normally use in walking in indoor spaces. As an additional safeguard, someone who knows the indoor space well will walk along to override any incorrect instructions given by the application. The application will also be thoroughly tested beforehand to ensure the chances of it providing erroneous instructions at the time of your test are very minimal.



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**Benefits:** A successful project will enable the blind and visually impaired (BVI) and those disoriented to move about more freely and easily in unfamiliar indoor spaces and make them more independent. The knowledge from the project will also aid improving the system and its future iterations, and possibly spur new directions of research to help the BVI population.

**Confidentiality:** Every effort will be made to keep your study-related information confidential. However, in order to make sure the study is done properly and safely there may be circumstances where this information must be released. By signing this form, you are giving the research team permission to share information about you with the following groups:

- Office for Human Research Protections or other federal, state, or international regulatory agencies;
- The Wichita State University Institutional Review Board;

The researchers may publish the results of the study. If they do, they will only discuss group results. Your name will not be used in any publication or presentation about the study.

**Compensation or Treatment for Research Related Injury:** Wichita State University does not provide medical treatment or other forms of reimbursement to persons injured as a result of or in connection with participation in research activities conducted by Wichita State University or its faculty, staff, or students. If you believe that you have been injured as a result of participating in the research covered by this consent form, you can contact the Office of Research and Technology Transfer, Wichita State University, Wichita, KS 67260-0007, telephone (316) 978-3285.

**Payment:** For each site visited, participants will be given a \$20 gift card at the site after their participation is complete. Study payments are taxable income. You will be asked to complete a W9 form which requires your name, address, and social security number in order for you to receive study payments. A Form 1099 will be sent to you and to the Internal Revenue Service if your payments are \$600 or more in a calendar year.



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**Refusal/Withdrawal:** Participation in this study is entirely voluntary. Your decision whether or not to participate will not affect your future relations with Wichita State University and/or Envision. If you agree to participate in this study, you are free to withdraw from the study at any time without penalty.

**Contact:** If you have any questions about this research, you can contact me at: Vinod Namboodiri, Jabara Hall 217, Wichita State University, 316-978-3922, vinod.namboodiri@wichita.edu. If you have questions pertaining to your rights as a research subject, or about research-related injury, you can contact the Office of Research and Technology Transfer at Wichita State University, 1845 Fairmount Street, Wichita, KS 67260-0007, telephone (316) 978-3285.

You are under no obligation to participate in this study. Your signature below indicates that:

- You have read (or someone has read to you) the information provided above,
- You are aware that this is a research study,
- You have had the opportunity to ask questions and have had them answered to your satisfaction, and
- You have voluntarily decided to participate.

You are not giving up any legal rights by signing this form. You will be given a copy of this consent form to keep.

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Printed Name of Subject

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Signature of Subject

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Date

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Printed Name of Witness

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Witness Signature

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Date