**Mini-Project – Sensor Lab**

**(ITL603)**

**PROPOSAL**

**Smart Blind Stick**

**T. E. Information Technology**

By

**Raj Jaiswal 57**

**Ashish Yadav 58**

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**Mini Project Proposal**

(strictly one page)

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| **Project Title** | **Smart Blind Stick** |
| **Project Members** (Mention Leader in Bold) | **Raj Jaiswal 57**  Ashish Yadav 58  Allan Rodrigues 59  Jonathan Sardinha 60 |
| **Situation/Problem/Opportunity/Need** | 30 million people are permanently blind and 285 million are visually impaired, according to the WHO. Without the aid of others they can't walk. To reach their destination they have to ask for directions. |
| **Problem Statement** | The blind and visually impaired commonly use a walking stick, however they do not have object detection. Also at times they might misplace their walking stick and have  difficulty in finding it. |
| **Objectives** | The main objective of the system is that it helps the blind people in both indoor and outdoor, care-free navigation. |
| **Method /Approach** (Steps/Modules/Proposed Work/Architectural Dia.) | He/she can also find the device easily as it can be located if lost via a transmitter in the stick and a receiver in the remote which makes a beeping sound when pressed within  a specific distance |
| **Success Criteria** (Advantages / Performance Metrics ) | Smart blind stick can be located via a remote.  Auto detection.  Locate the stick if lost using remote. |
| **Resources** (People ,Time, hardware / software resources, cost, other) | Arduino Uno R3 sensor  Battery  Jumper cable  Bread board  Ultrasonic sensor  Buzzer  Remote  Bluetooth |
| **Risk and Dependencies** | In rain circuit can damage.  Less mechanical strength. |
| **Remark** (can be continued as BE Project/Outhouse Project) | SL mini project |
| **References** (IEEE Format) | [1] Online: Available:  [https://www.researchgate.net/publication/](https://www.researchgate.net/publication/343682695_Smart_Blind_Stick_For_Obstacle_Detection_and_Navigation_System)  Accessed on 26th January 2022.  [2] Online: Available:  <https://acadpubl.eu/hub/2018-118-21/articles/21f/1.pdf>  Accessed on 25th January 2022. |