**Motivation**

This door detection algorithm was inspired by a desire to help the visually handicapped navigate the world around them. Door detection was one part of a conceived automatic navigation system.

**Experimental Results**

The door detection algorithm successfully detects 90% of rectangular, closed doors and correctly detects different types of doors in a variety of different situations.

**Region of Interest (ROI) Selection**

- Edge Extraction
- Corner Detection
- Quadrilateral Detection
- Quadrilateral Merge

**Door Line and Feature Extraction**

- Line Extraction
- Line Selection
- Blob Detection
- Door Detection

**Experimental Results**

The door detection algorithm successfully detects 90% of rectangular, closed doors and correctly detects different types of doors in a variety of different situations.