

**Project 2- 10 Points**  
**Due date: March 9, 6 p.m.**

- 1- Use **Breadth First Search** to find optimal path between any given initial point and goal point
- 2- Consider workspace as a 8-connected space
- 3- Use **Half-plane** and **semi-algebraic** models to represent obstacle space
- 4- Following figure represents the free space ( $C_{\text{free}}$ ) and obstacle space ( $C_{\text{obs}}$ )
- 5- Show optimal path using a simple graphical interface

