Literature Review on maze exploration in the IEEE MicroMouse Competition

# **Abstract**

Robots are gaining more and more space in our daily live. Be it as autonomous vacuum cleaners or lawn mowers. These robots have to work in an environment which is at least partly unknown. So exploration of this unknown territory becomes more and more important. The IEEE

The IEEE MicroMouse Competition is held annually since 197x. The rules are an autonomous robot has to fin the centre of a unknown 16x16 grid maze and then try to get there in the shortest time. The first try is to explore the maze and find the centre. The following tries are timed. The total time spent in the maze is then calculated as specified in the rules(University of California, 2015). The most time is spent during the exploration first try, so it is of vital importance to do this in the shortest time possible.

# **References**

University of California, L. A. C. (2015). *2015-All-America-Micromouse-Competition-Rules - 2015-All-America-Micromouse-Competition-Rules.pdf*. from <http://ieeebruins.org/documents/2015-All-America-Micromouse-Competition-Rules.pdf>