p
P
c
$|p|$
$+\infty$
$moveCost$
$pushCost$
P_{sort}
$p_{next}.o \notin O_{new}$
"The algorithm did not rely on search but simply observed the amount of adjacent free spaces on corners of the manipulated obstacle. While efficient, this algorithm is only applicable for world configurations popular with simple rectangular shaped static and movable obstacles. This is not realistic."
$c2$
$c5$
that creates a new opening
$c2$
it would be better to exchange lines 35 and

R_{init}
R_{goal}
$R \leftarrow$
R_{init}
$P_{sort} \leftarrow$
$\emptyset$
$minCost \leftarrow$
p_{opt}
$A(R_{init}, R_{goal})$
$p_{opt}.cost \leftarrow$
$|p_{opt}| *$
$moveCost$
$R \neq$
R_{goal}
$\mathcal{O}_{new} \leftarrow$
$\mathcal{O}_{new} \bigcup$
$_{n}ote$
$p_{opt} \bigcap \mathcal{O}_{new} \neq$
$\emptyset$
$p_{opt} \leftarrow$
AR
R_{goal}
$_{p}lan_{n}ote_{opt}.cost \leftarrow$
$|p_{opt}| *$
$moveCost$
$o \in$
$\mathcal{O}_{new}$
d
$\&$
$P_{sort}odp_{opt}$
$p_{next} \leftarrow$
$P_{sort}[0]$
$p_{opt}.cost \geq$
$p_{next}.minCost$
$p \leftarrow$
$p_{next}.o, p_{next}.d, p_{opt}$
$_{n}ote$
$\leq$
$p_{opt}.cost$
$p_{opt} \leftarrow$
p
$break$
P_{next}
P_{sort}
$p_{next} \leftarrow$
P_{sort}
$\mathcal{O}_{new} \leftarrow$
$\emptyset$
$R \leftarrow$
p_{opt}
The robot and what it perceives only change here,
o
d
p_{opt}
$P_{o,d} \leftarrow$
$\emptyset$
$c_1 \leftarrow$
$A(R, o.init)$
d
$c_2 \leftarrow$
$\emptyset$
o
d
$o.position \leftarrow$
$o.init$
$o.position$
$o.init$
o
d
$|c_2| *$
$pushCost \leq$
$p_{opt}.cost$
$_{n}ote$
$\leftarrow$
$o.position +$
$onepushind$
only
$_{d}etection_{n}ote_2 \leftarrow$
$\{o.init, o.position\}$
$_{c}omputation_{n}ote_3 \leftarrow$
$A(o.position, R_{goal})$
$\&$
$p \leftarrow$
$c_1 +$
$c_2 +$
c_3
$p.cost \leftarrow$
$(|c_1| +$
$|c_2|) *$

NOT
NOT
C_{est}
c_1
c_1
C_{Est}
C_M
$pushCost$
??
$_s ection.$
$euclideanCostL$
{
$c_{3_{(Est)}}$}
$c_{3_{(Est)}}$
$minCostL$
{
}
}
”Sec-
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or
c_3
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$minCostL$
$euclideanCostL$
$euclideanCostL$
$c_{3_{est}}$
$minCostL$
”if
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