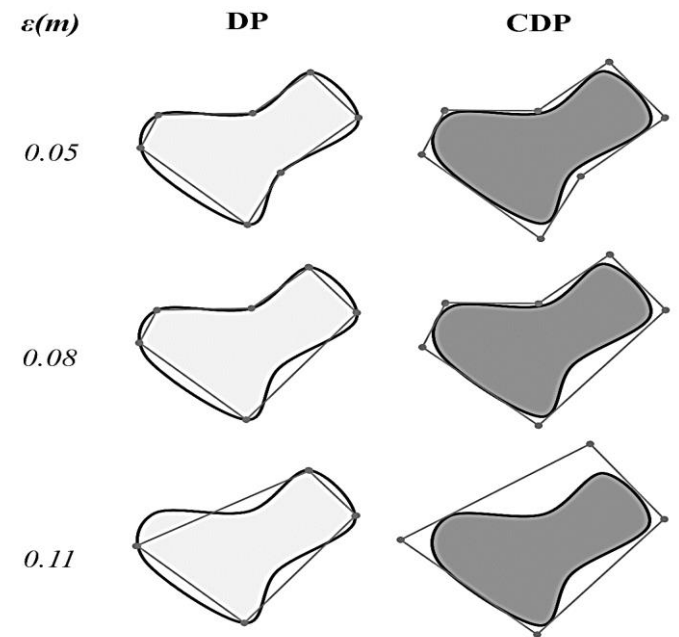# Circumscribed DP Polygonal Approximation for Curvilinear Obstacle Representation

Jin-Woo Jung, Byung-Chul So,
Jin-Gu Kang and Woo-Jin Jang
Dept. Of Computer Science and Engineering, Dongguk University, Seoul

- DP algorithm does not covered all actual obstacle area and it ignores the outer area.

- Both vector and grid maps can be used in the CDP algorithm.

- Outer Area of result of polygon approximation by CDP algorithm is always 0 (%).

- It can be confirmed that clearance is guaranteed when path planning with ECD method.

Result of DP and CDP Algorithms according to ε value