

Sliding-Window Informed RRT*: A Method for Speeding Up the Optimization and Path Smoothing

Chenming Li¹, Chaoqun Wang², Jiankun Wang³, Yutian Shen¹

¹EE, CUHK, HKSAR, China; ²CSE, SDU, China;

Max Q.-H. Meng^{3*}

³Department of Electronic and Electrical Engineering, SUSTech, China

- A sliding-window method is proposed to accelerate the convergence of Informed RRT*.
- The Softmax Action Selection-like method is applied to balance the exploration and exploitation, and guarantee the probabilistic completeness.
- Simulation experiments are carried out to demonstrate that our method can improve performance significantly.

