Translation and rotation errors will cause errors to accumulate

In VO, it is tightly coupled. Small drift of rotation

May cause bad VO performance. This paper applies to

Assist VO by improving rotation estimation with direction

refer to. Although the visual inertial odometer (VIO)

The performance is satisfactory, the components in the VIO are based on

Dead reckoning itself is very sensitive to drift issues.

Therefore, it is necessary to define a direction in the global

The framework provides an absolute reference for drift suppression.

The latest development of MEMS technology

Achieve a compact, precise and cost-effective attitude and

Heading Reference System (AHRS), providing accurate

And timely direction estimation. Different from VIO, in

This paper proposes a pose estimation framework, in which

The absolute heading reference is used to assist VO so that

Can achieve robust and accurate vehicle positioning.







