

# Monocular Object SLAM using Quadrics and Landmark Reference Map for Outdoor UAV Applications

Pengtao Shao, Fan Mo, Yaqian Chen, Ning Ding, and Rui Huang

Shenzhen Institute of Artificial Intelligence and Robotics for Society, and  
Institute

of Robotics and Intelligent Manufacturing, The Chinese University of Hong  
Kong, Shenzhen, Shenzhen, Guangdong, 518172, China.

- We propose geolocalization method based on object-level SLAM using visual input only.
- We use buildings as the landmark objects to match with offline reference maps.
- Keywords:  
GPS-denied, Object SLAM  
UAV geolocalization

