

UAV Based Visual Object Tracking

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Abstract : With the wide adoption of UAVs (unmanned aerial vehicles) in various industries by the government as well as private corporations for solving computer vision tasks it's necessary that their potential is analyzed completely. Recent advances in Deep Learning have also left us with a plethora of algorithms to solve different computer vision tasks. This study provides a comprehensive survey on solving the Visual Object Tracking problem and explains the tradeoffs involved in building a real-time yet reasonably accurate object tracking system for UAVs by looking at existing methods and evaluating them on the aerial datasets. Finally, the best trackers suitable for UAV-based applications are provided.

Keywords : deep learning, drones, single object tracking, visual object tracking, UAVs

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