

## عنوان مقاله:

Application of UAV photogrammetry in obtaining qualitative road pavement information

## محل انتشار:

هفتمین کنفرانس ملی پژوهش های کاربردی در مهندسی عمران، معماری و مدیریت شهری و ششمین نمایشگاه تخصصی انبوه سازان مسکن و ساختمان استان تهران (سال: 1399)

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## خلاصه مقاله:

To create an existing pavement management system, we need to develop information components based on different pavement management perspectives. One of the most important information components in these systems is the qualitative evaluation of the pavement status of roads. Therefore, details of surface pavement failures are very important in this regard. Damage to the pavement, in addition to depreciating vehicles, spending on maintenance and reducing the useful life of pavement structures, can also cause car accidents and reduce road safety. The most important surface pavement failures of the roads are cracks with longitudinal, transverse, diagonal, sloping and block cracks. Since these cracks are visually measurable, then image-based methods can be very useful in providing details such as the type of damage, its severity, its extent, and location. In this paper, due to the high capability of UAV photogrammetry in road surface imaging, it is suggested as a complementary method for use in the pavement management system in Iran. From the author's point of view, the output of UAV photogrammetric products will be significantly improved if the parameters of UAV imaging are adjusted. Therefore, the purpose of this study is to present a process to determine the optimal parameters in designing a UAV photogrammetric network and to develop image processing algorithms to improve the resolution and extract the visual features on the road surface.

## کلمات کلیدی:

pavement management system, qualitative evaluation, pavement cracks, UAV photogrammetry

## لینک ثابت مقاله در پایگاه سیویلیکا:

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