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MODEL-TO-IMAGE REGISTRATION AND AUTOMATIC TEXTURE MAPPING USING A VIDEO SEQUENCE TAKEN BY A MINI UAV

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Abstract. 3D city models are used in many fields. Photorealistic building texture reconstruction, thermal building inspections and heat leakage detection using thermal imagery, evaluation or study of the materials lying on the object's surface using multi-spectral imagery can be done using the same data which was used for 3D reconstruction or texture mapping. The registration between 3D building models and images has to be carried out. This paper presents model-to-image matching and texture extraction with best texture selection parameters, first for TIR image sequences taken from a helicopter and second for VIS image sequences taken by a Mini UAV (UAV).

[Conference Paper](#) (PDF, 333 KB)

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