ViRVIG
Visualització, Realitat Virtual i Interacció Gràfica

www.virvig.eu
C. Llorens i Artigas 4-6
Edifici U, 1er pis
E- 08028- Barcelona

Weathering of Urban Scenes: Challenges and Possible Solutions

Munoz-Pandiella, Imanol; Bosch, Carles; Merillou, Nicolas; Pueyo, Xavier; Merillou, Stephane; Patow, Gustavo A.

In this paper, we propose to discuss on one of the main challenges in realistic rendering of urban scenes: changes in appearance over time within a urban context. After studying the previous work on weathering techniques, we have found that there is a lack of estimation for some important environmental parameters (such as sun radiation) that have a wrong impact on weathering phenomena simulation and, thus, on the appearance of virtual objects. We also think that such a problem needs to be addressed on large urban models. Here, we discuss some possible solutions we have studied in our research. These solutions are focused on screen-space techniques, in order to efficiently compute those factors and use them to interactively generate weathering effects.

http://dx.doi.org/10.2312/mam.20161248

UPC