

Marcin Brzezicki: The use of ImageJ software in quality and quantity assessment of photon emission and ray-trace bitmap renderings in architecture and civil engineering.

Abstract

Inspiration for this paper was a recently completed civil engineering study of the influence of glare reflected of differently shaped glossy façades on surrounding. Apart from computer simulation (standard industrial application 3D Studio MAX ver. 10) used for photon emission ray-trace generated bitmaps, ImageJ software was employed to conduct a series of quality and quantity analysis. ImageJ provided tools to measure the Boundary of Reflection Area, and "focal area" of elevated luminance by using threshold and Bounding Rectangle function. The intensity of reflected glare was estimated and compared using Mean Gray Value and other analytical functions. In the paper digital data processing methodology that included ImageJ as a main image processing software is step by step described and evaluated.

Keywords

ImageJ, reflected facade glare, reflective glazing

Administrative data

Presenting author: Marcin Brzezicki

Organisation: Wrocław University of Technology, Faculty of Architecture

co-authors:

Type: Poster(portrait)

From:

<http://www.imagejconf.org/> - ImageJ User and Developer Conference

Permanent link:

<http://www.imagejconf.org/archive/imagej-user-and-developer-conference-2010/poster/brzezicki/start>



Last update: 2010/11/12 09:04