

Research on the applicability of E-Foto Open Source Software To Server Teaching and Researching in Universities of Viet Nam

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Abstract. The E-foto project (A free GNU/GPL educational digital photogrammetric workstation) has been in development at the Photogrammetry Lab of the Rio de Janeiro State University's School of Engineering since 2004. The idea behind the E-Foto project was to offer a simple set of software (a free Digital Photogrammetric Workstation) that could help students understand the principles behind Photogrammetry, thus bypassing eventual costs that would have barred many from learning about Photogrammetry. This objective was reached through the development of free and user-friendly photogrammetric software. This project is multidisciplinary. It involves several fields of knowledge, including Mathematical Modeling, Geodesy, Photogrammetry, and Software Engineering. The project is based on two main principles (pillars): freedom and self-teaching. The final idea is to lead the students to fully understand the principles behind Photogrammetry by reading the e-book, using the software, taking a look at its source code, and even modifying it or developing new modules for it.

This paper focuses on the presentation of the abilities of E-Foto in researching and teaching in the Vietnam's universities. Compared to some other free software initiatives and other commercial software, it is not only easier to understand but also more complete, its targeted user is rather professionals (surveyor, photographer, architects and archaeologist) and students who are working and studying in universities. E-foto's objective is to provide the full implementation of a digital photogrammetric workstation licensed as free software. Its basic proposal is to be a multi-platform set of software (Linux, Windows and MacOS) that can be ran in simple machines (that are not necessarily state-of-the-art computers), allowing basic stereoscopic viewing through anaglyph glasses, which can easily be purchased from online stores.

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