RANCANG BANGUN APLIKASI SISTEM PENGOLAHAN CITRA MICROSCANNER DENGAN METODE KALIBRASI UNTUK PROSES DISTORTION CORRECTION STUDI KASUS PT. NEURA INTEGRASI SOLUSI (NEURABOT)

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ABSTRACT

Image distortion causes an image to experience a change in value which causes the image to not be stitched, because the results of the process will result in a warping of the image visualization. Distortion is a process of turning facts and rules upside down which can cause the position of a photographic image to change from its actual location, resulting in reduced spatial and geometric qualities. As happened with the microscanner camera lens from PT. Neura Integration Solutions. The camera lens has a distortion problem where the resulting image looks concave or convex in the middle. This of course reduces the level of accuracy of the resulting data so that it cannot proceed to the stitching process. To overcome this problem, it is necessary to process distortion correction in the image using the calibration method. Calibration is the process of checking and setting the accuracy value by comparing it with standard values or benchmarks. The language used is Python with the Pycharm tool and uses OpenCV as image processing. Then to make it easier to use this system will be made in the form of a desktop-based application using the PyQt platform. The results of the application of distortion correction are expected to be a solution for image processing from microscanner cameras so that they are more precise so that the resulting data is appropriate.

Keywords : Distortion, Microscanner, Photographic Image, Distortion correction, calibration.