Abstract

In this thesis the author raised a case study on biopharma. P.T Bio Farma is a BUMN producer of Vaccines and Antisera, currently developing into a Life Science company. It was established on August 6, 1890. During the 126 years of its establishment Bio Farma has contributed to improving the quality of life of the nation, both in Indonesia and abroad. More than 130 countries have used Bio Farma products, especially developing countries, and 50 of them are countries that are members of the Organization of Islamic Cooperation (OIC). Bio Farma Vaccine Production meets the standards set by the Food and Drug Supervisory Agency (BPOM) and is pre-qualified by the World Health Organization (WHO). With a production capacity of more than 3.2 billion annual doses, Bio Farma has been meeting the needs of the National vaccine and global vaccine needs through WHO and UNICEF. With the philosophy of Dedicated to Improve Quality of Life, Bio Farma plays an active role in increasing the availability and independence of vaccine production in developing countries and Islamic countries to maintain global health security (Global Health Security). The first objective of this thesis is to solve the problem of attendance, where later before making a fingerprint, it will be examined whether it is human absence or not. The second is to make the efficiency of security cameras in the lab, so that the storage used on the hard drive is lighter by detecting who is coming out and entering, when someone comes out or enters the camera will detect the face, then save it to the hard drive. with video format. The third objective is to conduct research on frames per second (FPS), which impacts the face-detector system. As well as doing face-recognition of humans who leave or enter the lab. And the final goal is to find out the normal distance of the camera and human (face) that will be recognized

In this study three trials were conducted, the first in one frame there was one face, the second there were two faces in one frame, and the last, there were three faces in one frame. The prediction results for the first experiment are quite good with prediction results 11 times true and 7 times wrong.

Keywords: Biofarma, WHO, Haar Cascade Classifier, Python, OpenCV, Face Recognition, Frame.