Abstract

The development of a device for sexing chicken eggs for agricultural purposes in broiler chicken farming aims to create an automatic egg sexing machine using artificial intelligence (AI) technology. The steps of the project are as follows: 1. Design and develop an automatic egg sexing machine using AI technology, specifically deep learning techniques, and the CiRA CORE software for device development. 2. Develop an egg scanner using CiRA CORE. 3. Test the efficiency of the automatic egg sexing machine utilizing AI technology.

The results show that the invention, an automatic egg sexing machine using AI technology, consists of three main components: the conveyor belt system for eggs, the egg pushing system for sex separation, and the AI system developed using CiRA CORE for egg sexing. Testing the efficiency of the automatic egg sexing machine with 120 eggs resulted in a performance efficiency of 93%.