KLASIFIKASI JENIS KELAMIN BURUNG PARKIT MENGGUNAKAN METODE *OBJECT DETECTON DAN CONVOLUTIONAL NEURAL NETWORK* (CNN)

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ABSTRAK

Burung parkit merupakan burung hias berparuh bengkok yang memiliki warna dan corak bulu yang bermacam-macam. Dalam proses budidaya burung parkit, diperlukan kemampuan dalam mengidentifikasi jenis kelamin burung parkit. Salah satu cara mengidentifikasi jenis kelamin burung parkit dengan melihat warna *cere*. Masih banyak peternak masih bingung dalam mengklasifikasi jenis kelamin burung parkit dengan melihat warna *cere*. Sehingga penulis memiliki sebuah ide untuk mengembangkan aplikasi *image processing* dengan menggunakan model *object detection* dan *convolutional neural network* (CNN) yang bertujuan untuk mengatasi masalah dalam mengidentifikasi jenis kelamin burung parkit melalui warna *cere*. Hasil uji aplikasi klasifikasi jenis kelamin burung parkit jantan dan betina mampu mencapai akurasi 83%. Artinya, klasifikasi sudah terbentuk dengan baik.

Kata Kunci : *burung parkit, image processing, object detection, convolutional neural network.*

CLASSIFICATION OF GENDER TYPES OF PARKIT BIRDS USING OBJECT DETECTION AND CONVOLUTIONAL NEURAL NETWORK (CNN) METHODS

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ABSTRACT

The parakeet is an ornamental bird with a bent beak that has a variety of colors and feather patterns. In the process of parakeet cultivation, it is necessary to have the ability to identify the sex of the parakeet. One way to identify the sex of a parakeet is by looking at the color of the cere. There are still many breeders who are still confused in classifying the sex of parakeets by looking at the color of the cere. So the author has an idea to develop an image processing application using object detection models and convolutional neural network (CNN) which aims to overcome the problem of identifying the sex of parakeets through cere color. The test results of the sex classification application of male and female parakeets were able to achieve 83% accuracy. That is, the classification is well formed.

Keywords: *parakeets, image processing, object detection, convolutional neural network.*