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## Automated Animal Identification and Detection of

## **Species**

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Abstract: Automated Animal Identification and Detection of Species is a project that addresses the need for a more efficient and accurate method of identifying and detecting different animal species. The project will utilize deep learning techniques, including CNNs, to develop a system that can automatically recognize animal species based on their images. The system will be trained using a large dataset of animal images and fine-tuned using a pre-trained network VGG to optimize the training process and improve classification accuracy. This project has the potential to revolutionize the field of animal research and conservation by providing a more accurate and efficient method of identifying and detecting animal species. Both CNN model and VGG were used in this project, in these two models VGG have got high accuracy in detecting and classifying different types of animals, which can be beneficial in various applications, such as wildlife conservation, animal tracking, and crop protection, with a concise conclusion based on the findings.

**Keywords:** Automated Animal Identification, Detection of Species, Deep learning techniques, Convolutional Neural Networks (CNNs), VGG16.

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