IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 2, June 2023

Deep CNN Image Classifier

Prof. Manoj Chittawar¹, Tisha Sorte², Ujma Mohammad³, Alveena Sheikh⁴, Ragini Kamble⁵, Saundarya Meshram⁶

Professor, Computer Science Engineering Department¹
Students, Computer Science Engineering Department²³⁴⁵⁶
Rajiv Gandhi College of Engineering, Research and Technology, Chandrapur, Maharashtra, India

Abstract: Many problems in computer vision were saturating on their accuracy before a decade. However, with the rise of deep learning techniques, the accuracy of these problems drastically improved. One of the major problem was that of image classification, which is defined as predicting the class of the image. Cat and Dog image classification is one such example of where the images of cat and dog are classified. This paper aims to incorporate state-of-art technique for object detection with the goal of achieving high accuracy. A convolutional neural network is been build for the image classification task.

Keywords: Image Classification, Convolutional Neural Network, Keras, Deep Learning, Callbacks

REFERENCES

- [1] Golle, P. (2008, October). Machine learning attacks against the Asirra CAPTCHA. In Proceedings of the 15th ACM conference on Computer and communications security (pp. 535-542). ACM.
- [2] J. Elson, J. Douceur, J. Howell and J. Saul. Asirra: a CAPTCHA that exploits interest-aligned manual image categorization. Proc. of ACM CCS 2007, pp. 366-374.
- [3] MuthukrishnanRamprasath, M.Vijay Anand and Shanmugasundaram Hariharan, Image Classification using Convolutional Neural Networks. International Journal of Pure and Applied Mathematics, Volume 119 No. 17 2018, 1307-1319
- [4] Parkhi, O. M., Vedaldi, A., Zisserman, A., & Jawahar, C. V. (2012, June). Cats and dogs. In Computer Vision and Pattern Recognition (CVPR), 2012 IEEE Conference on (pp. 3498-3505). IEEE.
- [5] Zeiler, M. D., & Fergus, R. (2013). Visualizing and Understanding Convolutional Neural Networks. arXiv preprint arXiv:1311.2901.

DOI: 10.48175/IJARSCT-11313

[6] Bang Liu, Yan Liu, Kai Zhou "Image Classification for Dogs and Cats".

