

# kerasR: R Interface to the Keras Deep Learning Library

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## Software

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## Summary

Keras is a high-level neural networks API, originally written in Python, and capable of running on top of either TensorFlow or Theano. It was developed with a focus on enabling fast experimentation. This package provides an interface to Keras from within R. All of the returned objects from functions in this package are either native R objects or raw pointers to python objects, making it possible for users to access the entire keras API. The main benefits of the package are (1) correct, manual parsing of R inputs to python, (2) R-sided documentation, and (3) examples written using the API. It allows, amongst other things, users to load and run popular pre-trained models such as VGG-19 (He et al. 2015), ResNet50 (He et al. 2016), and Inception (Szegedy et al. 2015).

Most functions have associated examples showing a working example of how a layer or object may be used. These are mostly toy examples, made with small datasets with little regard to whether these are the correct models for a particular task. See the package vignettes for a more thorough explanation and several larger, more practical examples.

## References

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