Important Keras Modules

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- keras.models

- keras.layers

- keras.activations

- keras.optimizers

- keras.preprocessing

- keras.applications

keras.models

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- Sequential

keras.models

- Sequential

- Functional

keras.models

- Sequential

- Functional

```python
from keras.models import Sequential

model = Sequential()
```

keras.layers

keras.layers

- Input

keras.layers

- Input
- Dense

keras.layers

- Input
- Dense
- Conv2D, etc

keras.layers

- Input
- Dense
- Conv2D, etc

```python
from keras.layers import Dense, Conv2D

model = Sequential()
model.add(Dense(units=1))
```

keras.activations

keras.activations

- Sigmoid

keras.activations

- Sigmoid
- Tanh

keras.activations

- Sigmoid
- Tanh
- ReLU, etc

keras.activations

- Sigmoid
- Tanh
- ReLU, etc

```python
from keras.activations import sigmoid, tanh

model = Sequential()
model.add(Dense(1, activation=sigmoid))
```

keras.optimizers

keras.optimizers

- SGD

keras.optimizers

- SGD

- Adam, etc

keras.optimizers

- SGD

- Adam, etc

```python
from keras.optimizers import SGD, Adam

sgd = SGD(lr=0.01)

model = Sequential()
model.add(Dense(1, activation=sigmoid))

model.compile(optimizer=sgd)
```

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keras.preprocessing

keras.preprocessing

- image

keras.preprocessing

- image
- text

keras.preprocessing

- image
- text
- sequence

keras.preprocessing

- image
- text
- sequence

```
from keras.preprocessing import image

image.load_img('images/emergency_1000.jpg')
```

keras.applications

keras.applications

- VGG16
- VGG19
- ResNet, etc

```python
from keras.applications import vgg16

model = vgg16.VGG16(weights='imagenet')
```

Important Keras Modules

- **keras.models**   -   used to create template for DL models

- **keras.layers**   -   prewritten code for the necessary layers

- **keras.activations**   -   prewritten code for the necessary activation functions

- **keras.optimizers**   -   prewritten code for the necessary optimization functions

- **keras.preprocessing**   -   prewritten utility functions to handle unstructured data

- **keras.applications**   -   Out-of-the-box implementations for pretrained models

Thank you