# tf.contrib.framework.model_variable

```
model_variable(
    name,
    shape=None,
    dtype=tf.float32,
    initializer=None,
    regularizer=None,
    trainable=True,
    collections=None,
    caching_device=None,
    device=None,
    partitioner=None,
    custom_getter=None,
    use_resource=None
)
```

Defined in `tensorflow/contrib/framework/python/ops/variables.py`.

See the guide: Framework (contrib) > Variables

Gets an existing model variable with these parameters or creates a new one.

## Args:

- `name`: the name of the new or existing variable.
- `shape`: shape of the new or existing variable.
- `dtype`: type of the new or existing variable (defaults to `DT_FLOAT`).
- `initializer`: initializer for the variable if one is created.
- `regularizer`: a (Tensor -> Tensor or None) function; the result of applying it on a newly created variable will be added to the collection GraphKeys.REGULARIZATION_LOSSES and can be used for regularization.
- `trainable`: If `True` also add the variable to the graph collection `GraphKeys.TRAINABLE_VARIABLES` (see `tf.Variable`).
- `collections`: A list of collection names to which the Variable will be added. Note that the variable is always also added to the `GraphKeys.GLOBAL_VARIABLES` and `GraphKeys.MODEL_VARIABLES` collections.
- `caching_device`: Optional device string or function describing where the Variable should be cached for reading. Defaults to the Variable's device.
- `device`: Optional device to place the variable. It can be an string or a function that is called to get the device for the variable.
- `partitioner`: Optional callable that accepts a fully defined `TensorShape` and dtype of the `Variable` to be created, and returns a list of partitions for each axis (currently only one axis can be partitioned).
- `custom_getter`: Callable that allows overwriting the internal get_variable method and has to have the same signature.
- `use_resource`: If `True` use a ResourceVariable instead of a Variable.

## Returns:

The created or existing variable.



*Last updated November 2, 2017.*