

# tf.contrib.seq2seq.SampleEmbeddingHelper

## Contents

Class `SampleEmbeddingHelper`

## Properties

`batch_size`

`sample_ids_dtype`

## Class `SampleEmbeddingHelper`

Inherits From: `GreedyEmbeddingHelper`

Defined in `tensorflow/contrib/seq2seq/python/ops/helper.py`.

A helper for use during inference.

Uses sampling (from a distribution) instead of argmax and passes the result through an embedding layer to get the next input.

## Properties

**`batch_size`**

**`sample_ids_dtype`**

**`sample_ids_shape`**

## Methods

### `__init__`

```
__init__(
    embedding,
    start_tokens,
    end_token,
    softmax_temperature=None,
    seed=None
)
```

Initializer.

Args:

- `embedding`: A callable that takes a vector tensor of `ids` (argmax ids), or the `params` argument for `embedding_lookup`. The returned tensor will be passed to the decoder input.
- `start_tokens`: `int32` vector shaped `[batch_size]`, the start tokens.

- `end_token` : `int32` scalar, the token that marks end of decoding.
- `softmax_temperature` : (Optional) `float32` scalar, value to divide the logits by before computing the softmax. Larger values (above 1.0) result in more random samples, while smaller values push the sampling distribution towards the argmax. Must be strictly greater than 0. Defaults to 1.0.
- `seed` : (Optional) The sampling seed.

Raises:

- `ValueError` : if `start_tokens` is not a 1D tensor or `end_token` is not a scalar.

## initialize

```
initialize(name=None)
```

## next\_inputs

```
next_inputs(
    time,
    outputs,
    state,
    sample_ids,
    name=None
)
```

`next_inputs_fn` for GreedyEmbeddingHelper.

## sample

```
sample(
    time,
    outputs,
    state,
    name=None
)
```

`sample` for SampleEmbeddingHelper.

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