tf.spectral.irfft

```
irfft(
    input_tensor,
    fft_length=None,
    name=None
)
```

Defined in `tensorflow/python/ops/spectral_ops.py` .

See the guide: Spectral Functions > Discrete Fourier Transforms

Inverse real-valued fast Fourier transform.

Computes the inverse 1-dimensional discrete Fourier transform of a real-valued signal over the inner-most dimension of `input` .

The inner-most dimension of `input` is assumed to be the result of `RFFT` : the `fft_length / 2 + 1` unique components of the DFT of a real-valued signal. If `fft_length` is not provided, it is computed from the size of the inner-most dimension of `input` (`fft_length = 2 * (inner - 1)`). If the FFT length used to compute `input` is odd, it should be provided since it cannot be inferred properly.

Along the axis `IRFFT` is computed on, if `fft_length / 2 + 1` is smaller than the corresponding dimension of `input` , the dimension is cropped. If it is larger, the dimension is padded with zeros.

Args:

- `input` : A `Tensor` of type `complex64` . A complex64 tensor.
- `fft_length` : A `Tensor` of type `int32` . An int32 tensor of shape [1]. The FFT length.
- `name` : A name for the operation (optional).

Returns:

A `Tensor` of type `float32` . A float32 tensor of the same rank as `input` . The inner-most dimension of `input` is replaced with the `fft_length` samples of its inverse 1D Fourier transform.

numpy compatibility

Equivalent to np.fft.irfft

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