tf.fake_quant_with_min_max_vars_gradient

```
fake_quant_with_min_max_vars_gradient(
    gradients,
    inputs,
    min,
    max,
    num_bits=8,
    narrow_range=False,
    name=None
)
```

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

See the guide: Tensor Transformations > Fake quantization

Compute gradients for a FakeQuantWithMinMaxVars operation.

Args:

- `gradients`: A `Tensor` of type `float32`. Backpropagated gradients above the FakeQuantWithMinMaxVars operation.
- `inputs`: A `Tensor` of type `float32`. Values passed as inputs to the FakeQuantWithMinMaxVars operation. min, max: Quantization interval, scalar floats.
- `min`: A `Tensor` of type `float32`.
- `max`: A `Tensor` of type `float32`.
- `num_bits`: An optional `int`. Defaults to `8`. The bitwidth of the quantization; between 2 and 8, inclusive.
- `narrow_range`: An optional `bool`. Defaults to `False`. Whether to quantize into 2^num_bits - 1 distinct values.
- `name`: A name for the operation (optional).

Returns:

A tuple of `Tensor` objects (backprops_wrt_input, backprop_wrt_min, backprop_wrt_max).

- `backprops_wrt_input`: A `Tensor` of type `float32`. Backpropagated gradients w.r.t. inputs: `gradients * (inputs >= min && inputs <= max)`.
- `backprop_wrt_min`: A `Tensor` of type `float32`. Backpropagated gradients w.r.t. min parameter: `sum(gradients * (inputs < min))`.
- `backprop_wrt_max`: A `Tensor` of type `float32`. Backpropagated gradients w.r.t. max parameter: `sum(gradients * (inputs > max))`.

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