Copyright Notice

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    validationData: [testXs, testYs],
    epochs: 20,
    shuffle: true,
    callbacks: fitCallbacks
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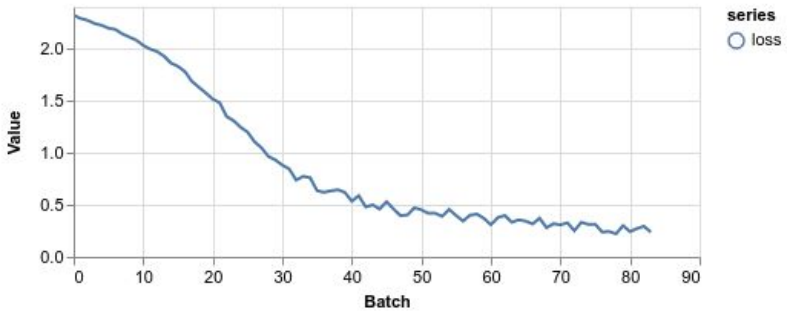
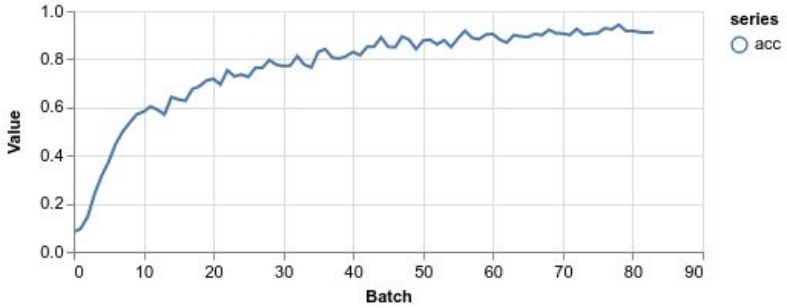
```

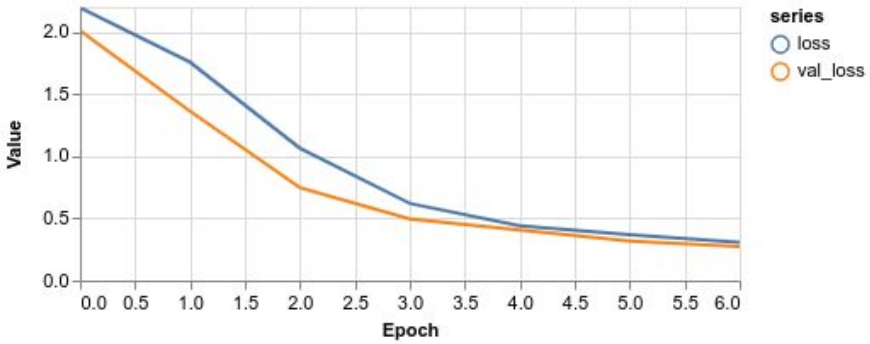
Model Training

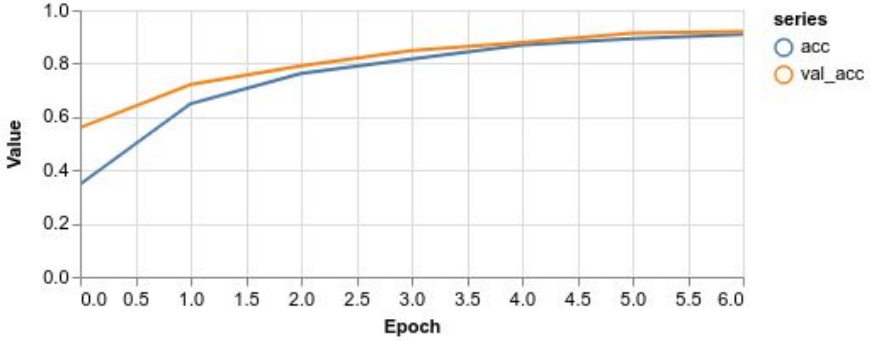
onBatchEnd





onEpochEnd





```html
<script src="https://cdn.jsdelivr.net/npm/@tensorflow/tfjs-vis"></script>
```

https://github.com/tensorflow/tfjs-vis

GitHub - tensorflow/tfjs-vis:

GitHub, Inc. [US] | https://github.com/tensorflow/tfjs-vis

README.md

tfjs-vis

tfjs-vis is a small library for *in browser* visualization intended for use with TensorFlow.js.

It's main features are:

- A set of visualizations useful for visualizing model behaviour
- A set of high level functions for visualizing objects specific to TensorFlow.js
- A way to organize visualizations of model behaviour that won't interfere with your web application

The library also aims to be flexible and make it easy for you to incorporate custom visualizations using tools of your choosing, such as d3, Chart.js or plotly.js.

Demos

- Visualizing Training with tfjs-vis
- Looking inside a digit recognizer

Installation

You can install this using npm with

```
npm install @tensorflow/tfjs-vis
```

or using yarn with

```
yarn add @tensorflow/tfjs-vis
```

You can also load it via script tag using the following tag, however you need to have TensorFlow.js also loaded on the page to work. Including both is shown below.

```
<script src="https://cdn.jsdelivr.net/npm/@tensorflow/tfjs"> </script>
<script src="https://cdn.jsdelivr.net/npm/@tensorflow/tfjs-vis"></script>
```

Building from source

To build the library, you need to have node.js installed. We use `yarn` instead of `npm` but you can use either.

First install dependencies with

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model.fit(trainXs, trainYs, {
    batchSize: BATCH_SIZE,
    validationData: [testXs, testYs],
    epochs: 20,
    shuffle: true,
    callbacks: fitCallbacks
});
```

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model.fit(trainXs, trainYs, {
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    validationData: [testXs, testYs],
    epochs: 20,
    shuffle: true,
    callbacks: fitCallbacks
});
```
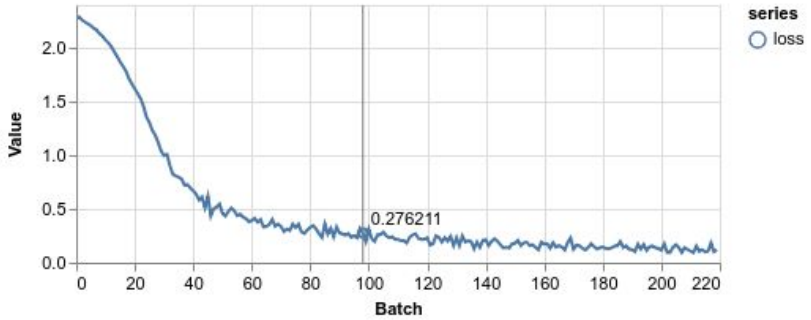
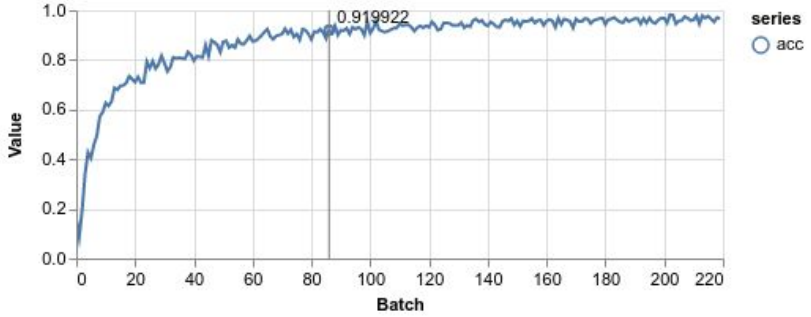

```
const fitCallbacks = tfvis.show.fitCallbacks(container, metrics);
```

```
const metrics = ['loss', 'val_loss', 'acc', 'val_acc'];
const container = { name: 'Model Training', styles: { height: '1000px' } };
const fitCallbacks = tfvis.show.fitCallbacks(container, metrics);
```

onBatchEnd





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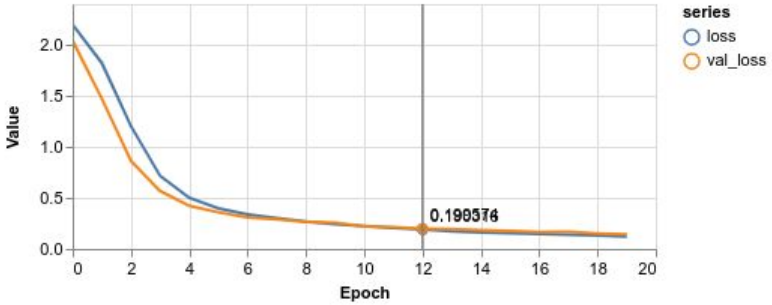

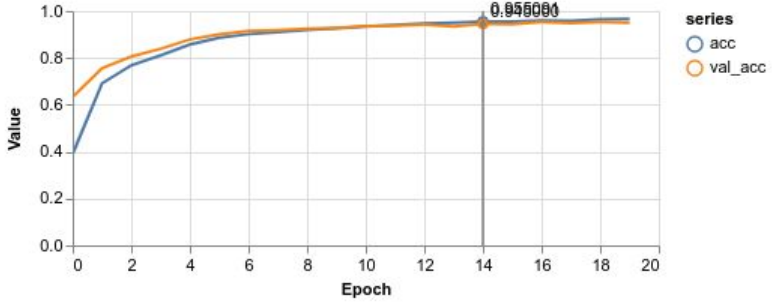

https://storage.googleapis.com/learnjs-data/model-builder/mnist_images.png

https://storage.googleapis.com/learnjs-data/model-builder/mnist_labels_uint8

	00	01	02	03	04	05	06	07	08	09
0000:0000	00	00	00	00	00	00	00	01	00	00
0000:000A	00	00	00	01	00	00	00	00	00	00
0000:0014	00	00	00	00	01	00	00	00	00	00
0000:001E	00	00	00	00	00	00	01	00	00	00
0000:0028	00	01	00	00	00	00	00	00	00	00
0000:0032	00	00	00	00	00	00	00	00	01	00
0000:003C	00	01	00	00	00	00	00	00	00	00
0000:0046	01	00	00	00	00	00	00	00	00	00
0000:0050	00	00	00	00	00	00	00	00	00	01
0000:005A	00	00	00	00	00	00	00	00	01	00
0000:0064	01	00	00	00	00	00	00	00	00	00
0000:006E	00	00	00	01	00	00	00	00	00	00

```
export class MnistData {
...
    async load() {
    // Download the sprite and slice it
    // Download the labels and decode them
    }

    nextTrainBatch(){
    // Get the next training batch
    }

    nextTestBatch(){
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```
const data = new MnistData();
await data.load();
```

```
const [trainXs, trainYs] = tf.tidy(() => {
    const d = data.nextTrainBatch(TRAIN_DATA_SIZE);
    return [
        d.xs.reshape([TRAIN_DATA_SIZE, 28, 28, 1]),
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});
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