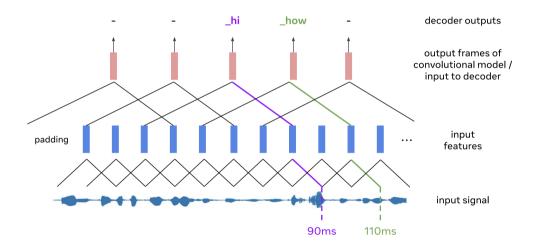
Example of per-word timestamps

In this example, a convolutional model is used. Inference is run continuously (not in a chunk-based manner). In particular:

- Feature extraction is performed with a window of $20\,\mathrm{ms}$ with shift of $10\,\mathrm{ms}$
- Convolutional model processes the features. The model sub-samples the input sequence twice and for each output frame has receptive field covering 4 past and 2 future frames.
- Decoder decodes the sub-sampled sequence of output frames.



The timestamps for the output words are:

- hi: 90 ms (the word was emitted after seeing 3 output frames $\rightarrow 8$ input frames $\rightarrow 90 \text{ ms}$ of input signal)
- how: 110 ms (the word was emitted after seeing 4 output frames \rightarrow 10 input frames \rightarrow 110 ms of input signal)