

Location guided attention KWS phase1 result

th	1	0.9	0.8	0.7	0.6	0.5	0.4	0.3	0.2	0.1
acc	x	x	0.32	0.47	0.59	0.63	0.66	0.66	0.71	0.83

Transformer CTC Model PER: < 40% (greedy search)

Frame down sampling is important for CTC Model

FNN without frame down sampling PER: 53%

FNN with frame down sampling PER: 70% !!!

The assumption behind CTC: the output is not continuous. Just like Chain model in Kaldi. Each state in Chain HMM only have two PDF class forward pdf class and self-loop pdf class (actually BLANK in CTC model)

Next plan:

- 1. Copy Transformer in WeNet make a reasonable PER model.**
- 2. Forget about location just use Transformer as Neural based QbE**