

Table 1. *Comparison of different language modeling techniques on Penn Corpus. Models are interpolated with KN backoff model.*

Model	PPL
KN5	141
Random forest (Peng Xu) [8]	132
Structured LM (Filimonov) [9]	125
Syntactic NN LM (Emami) [10]	107
RNN trained by BP	113
RNN trained by BPTT	106
4x RNN trained by BPTT (mixture)	98