Bug fixer predicting Word embedding matrix generating Conv_list W(t-2) W(t+1) W(t+2) W(t-1) **Convolution** Max-pooling output (N*(L-3+1)*512) input W(t) (N*1*512) Word2vec (N*(L-4+1)*512) W(t+1) W(t+2) W(t-2) W(t-1) word embeddings output output output (N*1*512) (N*1*(512*3)) (N*(512*3)) Fully connected (N*(L-5+1)*512) ___ optimize ____ **TextCNN** word co-W(t) occurrence matrix Glove W(t-2) output output output output \longrightarrow word embeddings NextBug **LSTM** LSTM LSTM (N*Numbers of developers) word embeddings **ELMo** fixers bug reports **Bi-LSTM** d=768 Transformer Encoder N=12 **Transformer Encoder Transformer Encoder** word embeddings (Numbers of developers) MLP Bert