Representation learning with linguistic structure
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Broad-coverage semantics

After encouraging them, he told them goodbye and left for Macedonia.

STEMULATE _EMOTION

Time Speaker TELLING Addressee Message

STIMULATE _EMOTION Experiencer

TIME VECTOR Landmark Event Event

DEPARTING Goal

Swabha Swayamdipta - CMU / UW
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TIME_VECTOR: Landmark Event

STIMULATE_EMOTION: Experimenter

TELLING: Speaker, Addressee, Message

DEPARTING: Time, Theme, Goal

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Deep multitask learning
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Multiple semantic sources as well as syntax, deep or shallow
Deep multitask learning

Multiple semantic sources as well as syntax, deep or shallow

Structure predictors based on deep neural nets
Looking forward:
Utilizing broad-coverage semantics

• Can we use token and higher level representations to build semantically-aware
  • Text classifiers?
  • Question-answering systems?
  • Language generators?