

## HW05: Logic and Abduction

Hand in at: <http://www.cs.utah.edu/~hal/handin.pl?course=cmsc723>. Remember that only PDF submissions are accepted. We encourage using L<sup>A</sup>T<sub>E</sub>X to produce your writeups. See `hw00.tex` for an example of how to do so. You can make a `.pdf` out of the `.tex` by running “`pdflatex hw00.tex`”.

### 1 Abduction

Consider the sentence “Congress gave John a medal.” Construct a logical form for this sentence along the lines of the “Boston called” example in Hobbs. (You should assume that only animate things can “give” stuff, and that “Congress” is not animate.) Write out an interpretation, along the lines of Figure 2, and mark which parts of the interpretation are the “new information.”

Further, suppose that the sentence were “Congress gave someone named John a medal.” Don’t rederive the logical form or anything, but write a few sentences about what is different about this sentence, in the sense of what the new information is, and what is in the background database.