

CS4600 - Introduction to Intelligent Systems

Homework 3 - Representing Facts with Logic

Translate the following English sentences to First-Order Logic (FOL) using the following predicates: Has(Joe,x), Dog(x), Cat(x), Cute(x), and Scary(x).

- a) Joe has a cute dog.
- b) All of Joe's dogs are cute.
- c) Unless Joe has a dog, he is scary.
- d) Either Joe has at least one cat and at least one dog or he is scary (but not both at the same time).
- e) Not all dogs are both scary and cute.