

CS 3600 - Introduction to Intelligent Systems

Homework 4 - Reasoning with Logic

Translate the following English sentences to First-Order Logic (FOL) using the following predicates: $Cat(x)$, $Dog(x)$, and $IsFriendOf(x,y)$. Convert the knowledgebase to CNF and then use resolution to show that Sam is not a dog.

- Joe is a cat.
- No cat has a dog friend.
- Sam is Joe's friend.