

Introduction to AI

Assignment 1

Due Week 8 – March 11 -11:59pm

1. [5pts (PEAS) + 5pts (Environment)] Aeroflot is designing a newly automated check-in counter. The counter should be able to check from the PNR number, passport scan, etc. look up the flight. It will then verify the visa if required as well as check in baggage and print any required tags and passes. They need a PEAS and a description of the environment (ignore Known/Unknown) with all necessary justifications.
2. [5pts+5pts] Fallout 76 has had major problems with it's NPCs. They would like you to make a PEAS for a new edition of the game – examining the non-vendor NPC, as well as give them an idea of the environment (ignore Known/Unknown). Be sure to justify your decisions.
3. [20pts] Create a set of Prolog rules which implement Wumpus World on a 10 by 10 space. There can be any number of pits, one gold, and one Wumpus. The player may be assumed to begin in the bottom left-hand square (1,1). The code should be able to print out all possible solution paths.
4. [10pts] Write a short report – about 2 pages – testing your code on a variety of inputs. Show both possible and impossible boards (note – you need to figure out what makes for an impossible board). Show an example where your agent kills the Wumpus.