CSCE 330 Fall 2012

Quiz 1

Assigned Thursday, 10-08-30

1. Here is a quote from: Laskey, Kathryn Blackmond and Suzanne M. Mahoney. "Network Engineering for Agile Belief Network Models." *IEEE Transactions on Knowledge and Data Engineering*, vol.12, no.4 (July/August 2000), pp.487–497.

The literature on evaluation distinguishes between verification and validation. *Mystery1* is concerned with measuring the degree with which a system meets the specifications for which it was designed. *Mystery1* of belief network models includes evaluating factors such as correctness of algorithms, functional completeness of the knowledge base, speed of processing, and satisfaction of interface requirements with other systems. *Mystery1* should also include checking the extent to which the design, coding, and documentation of the system meet organizational standards. *Mystery2* measures the extent to which the system meets the operational needs for which it was designed. At the current stage of our own knowledge base, we have had limited opportunity to perform *mystery2*.

Which of mystery1 and mystery2 is verification? Which one is validation? **Answer**: mystery1 is verification, mystery2 is validation.

- 2. Match:
 - 1. C
 - 2. Prolog
 - 3. Haskell

with

- a. Logic language
- b. Functional language
- ullet c. Imperative language

and with

- i. Destructive assignment
- ii. Write-once variables

and with

- α Recursion
- β Iteration

Answer: $1 \text{ci}\beta$, $2 \text{aii}\alpha$, $3 \text{bii}\alpha$.