CIS 7414X: Homework Assignment 5

Problem 2

Consider the BN that you constructed for your project, and discuss the following issues in your project report.

- Identify the type of each node: target/query, evidence/observation, context, controllable.

- Re-assess your choice of nodes and values

  - if you discretized a continuous variable, discuss it in the light of the discussion in 9.3.1 (in Korb& Nicholson's book).

- Label each arc with the relationship that is being modeled, using the relationships described in 9.3.2 (in Korb& Nicholson's book) or others you might think of.

- Use Matilda to investigate the dependence and independence relationships in your network.

  - Boneh, T (2003). Support for Graphical Modelling in Bayesian Network Knowledge Engineering: a Visual tool for domain experts, Dept. of Computer Science, University of Melbourne, Masters thesis.

  - Software (for Windows, zipped) `http://www.csse.monash.edu.au/bai/software/Deploy.zip`

- (Bonus question) Can you map the probabilities in the CPTs into a qualitative scale, as in 9.3.3.2 (in Korb& Nicholson's book)?