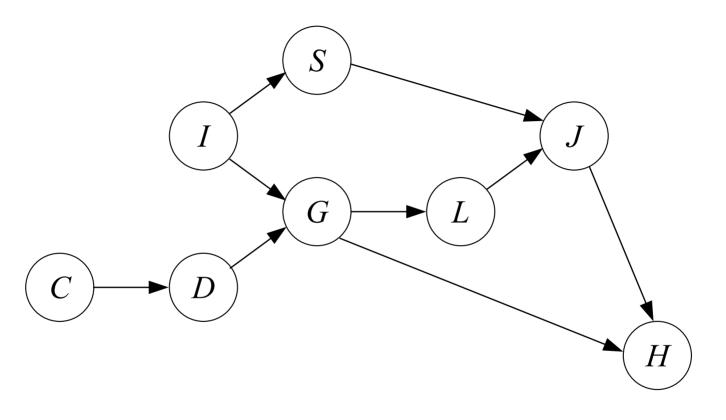
Bayesian Network "Extended Student"



C := Coherence, D := Difficulty, G := Grade, H := Happy, I := Intelligence, J := Job, L := Letter; S := SAT

Daphne Koller and Nir Friedman, "Probabilistic Graphical Models: Principles and Techniques", MIT Press, 2009

P(C)	P(I)	$P(L \mid G)$	$P(S \mid I)$
C_0 C_1 C_2	i_0 i_1	l_0	l_1 s_0 s_1
0.2 0.5 0.3	0.7 0.3	$g_0 = 0.10$	0.90 i_0 0.95 0.05
$P(D \mid C)$		$g_1 = 0.40$	
d_0 d_1		$g_2 \qquad 0.99$	$P(H \mid G, J)$
$c_0 = 0.2 = 0.8$			$h_0 \qquad h_1 \qquad h_2$
$c_1 = 0.5 = 0.5$		P(D)	$g_0, j_0 = 0.60 = 0.30 = 0.10$
$c_2 = 0.8 = 0.2$		j_0 j_1	$g_0, j_1 = 0.01 = 0.10 = 0.89$
F	$P(G \mid D, I)$	$l_0, s_0 = 0.95 = 0.0$	$g_1, j_0 = 0.80 = 0.15 = 0.05$
g_0	g_1 g_2	$l_0, s_1 = 0.25 = 0.7$	$g_1, j_1 = 0.10 = 0.20 = 0.70$
$d_0, i_0 = 0.$.30 0.40 0.30	$l_1, s_0 = 0.65 = 0.3$	$g_2, j_0 = 0.95 = 0.04 = 0.01$
$d_0, i_1 = 0$	90 0.08 0.02	$l_1, s_1 = 0.15 = 0.8$	$g_2, j_1 = 0.20 = 0.30 = 0.50$
$d_1, i_0 = 0$	0.05 0.25 0.70		
$d_1, i_1 = 0$.50 0.30 0.20		

Moralized graph

