Why I Don't Get Enough Sleep
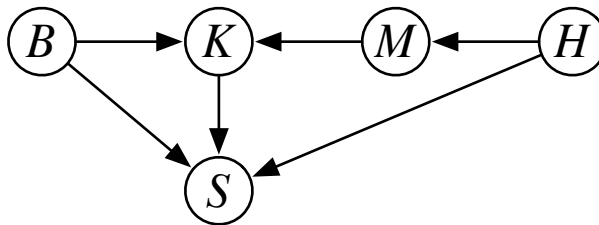
M	B	P(K)
t	t	0.5
t	f	0.3
f	t	0.3
f	f	0.2

H	P(M)
t	0.14
f	0.3

P(H)
0.6

P(B)
0.3

B	K	H	P(S)
t	t	t	0.05
t	t	f	0.1
t	f	t	0.1
t	f	f	0.5
f	t	t	0.1
f	t	f	0.4
f	f	t	0.5
f	f	f	0.8

B = DogsBark, K = KidsWake, M = KidsWatchMovie, H = HomeworkDue, S = GoodSleep

If the dogs bark, they might wake up the kids, and they might keep me from sleeping. If the kids wake up, I'm probably not going to get good sleep. If the kids watch a movie they're more likely to have a bad dream and wake up. If I don't have homework due, there's a better chance the kids will watch a movie (with me). If I do have homework due, I'm unlikely to get good sleep.

I'd like to find the probability of getting a good night's sleep if I have homework and the kids watch a movie: P(S=t|H=t,M=t)