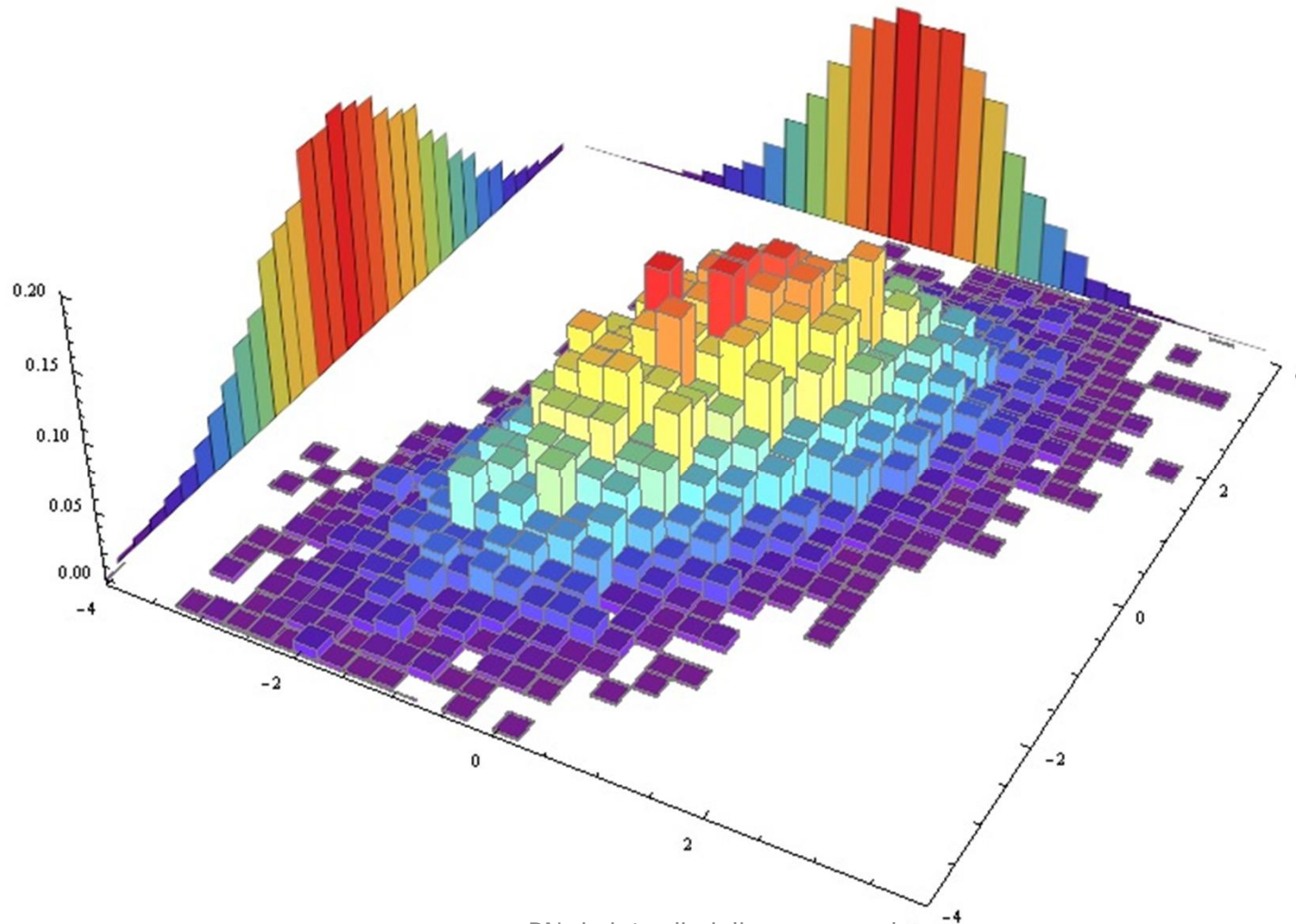
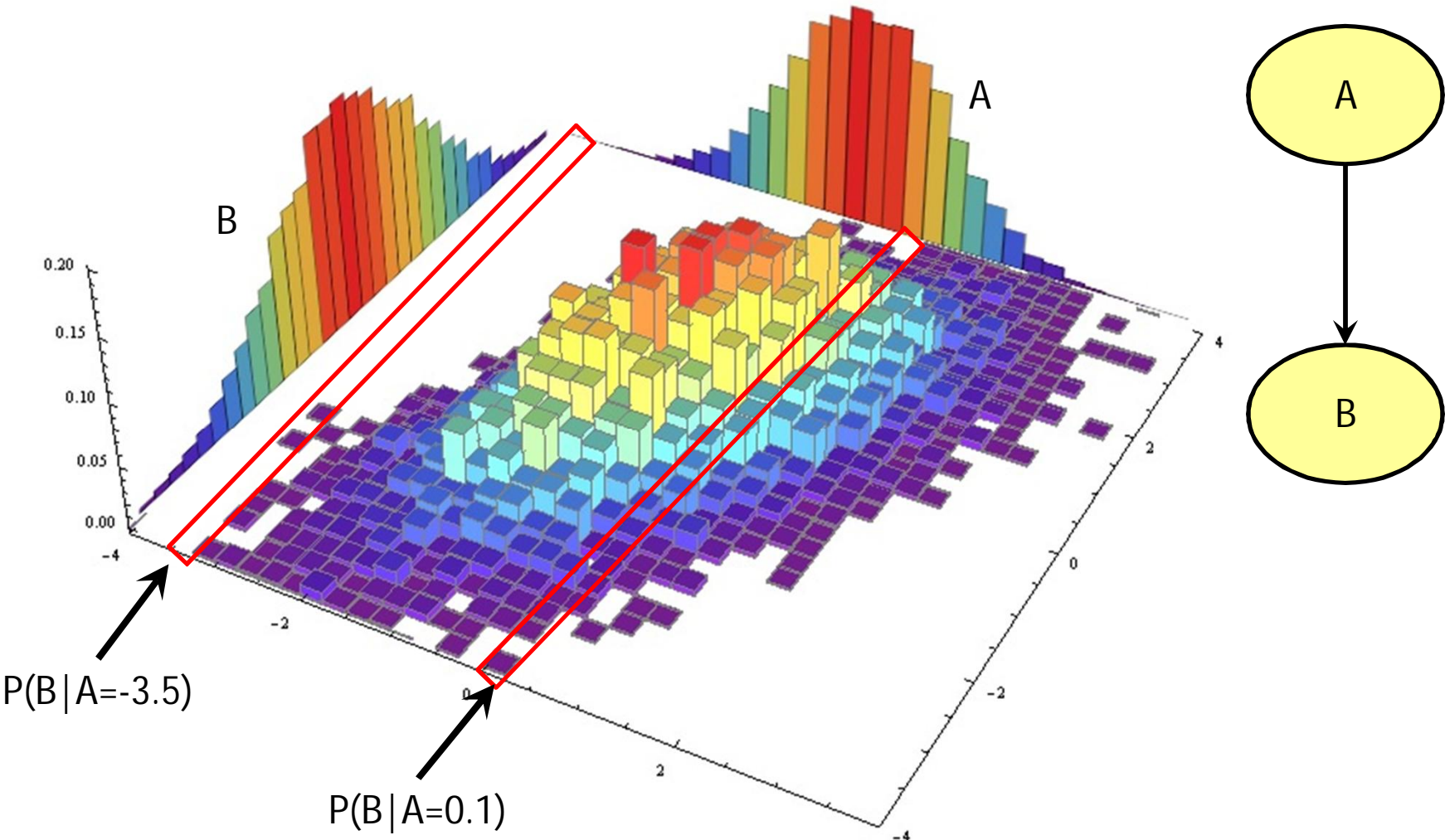


Joint, marginal, conditional distributions

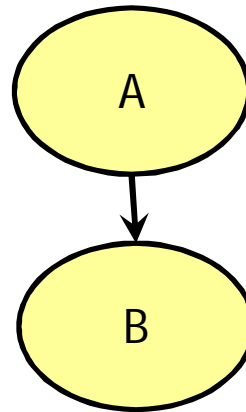
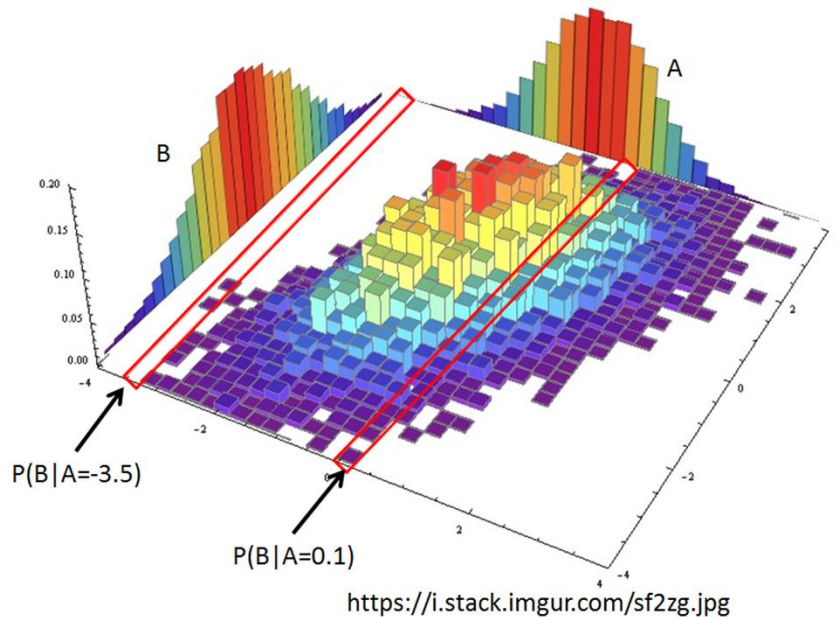
Joint & marginal distributions



Conditional distributions

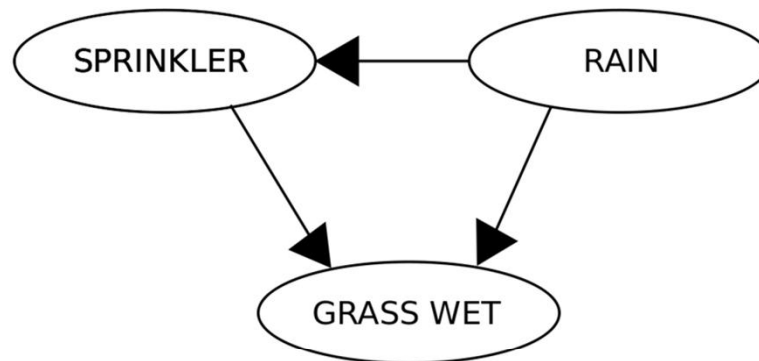


Conditional distributions



- For this model we need to define
 - The probability distribution of A
 - The conditional distribution of B; i.e. the probability distribution of B for each possible value of A

RAIN	SPRINKLER	
	T	F
F	0.4	0.6
T	0.01	0.99



RAIN	
T	F
0.2	0.8

SPRINKLER	RAIN	GRASS WET	
		T	F
F	F	0.0	1.0
F	T	0.8	0.2
T	F	0.9	0.1
T	T	0.99	0.01

- Once you have defined the marginal / conditional probability distributions, you can calculate any probabilities, such as probabilities of any other variables, if the value of one is known
- BN software does this for you automatically