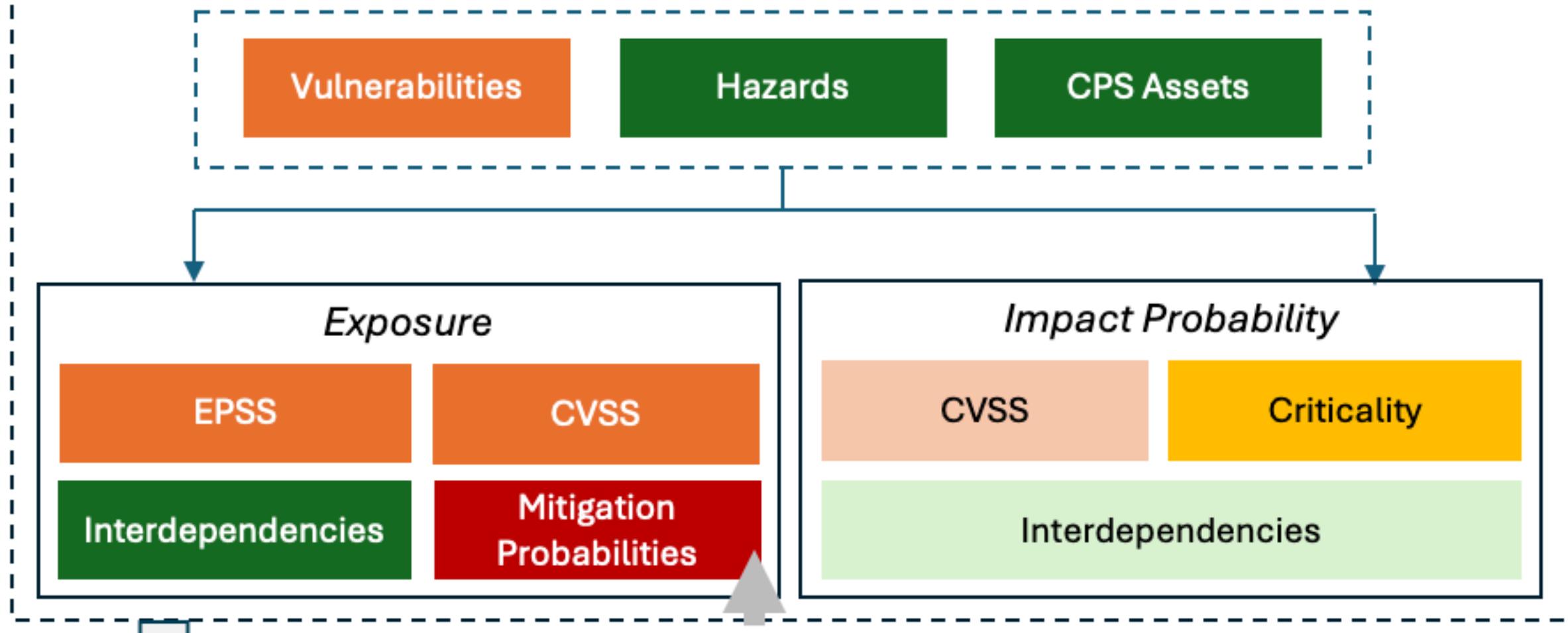


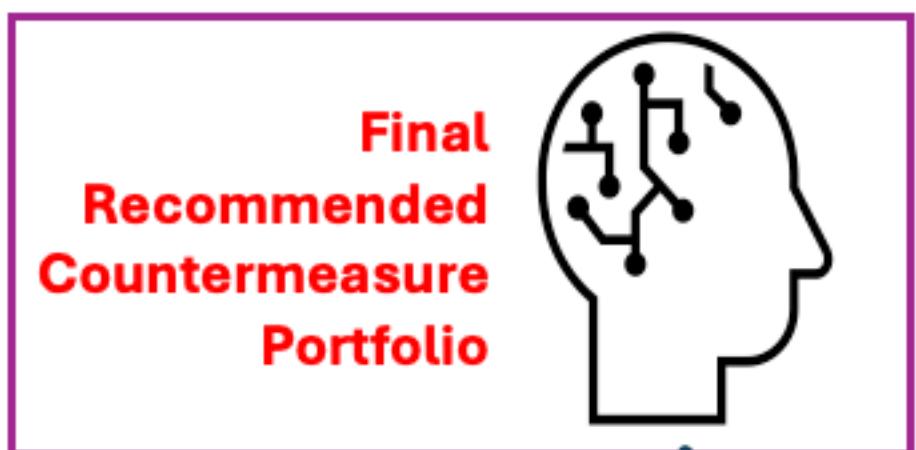
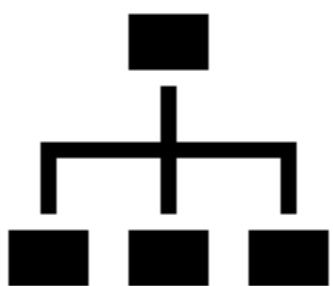
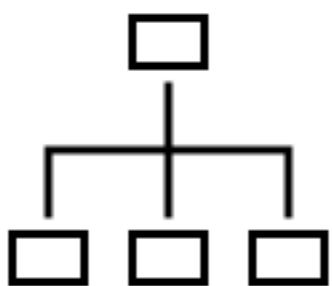
# Cyber-Physical System Model



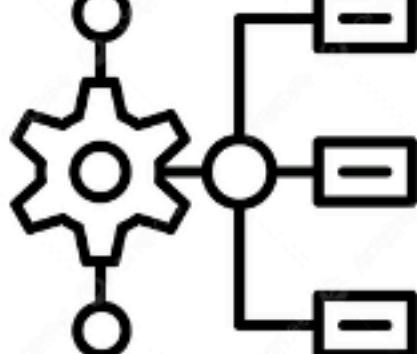
**1. Model attributes inform BN updates**

**2. Candidate countermeasure portfolios update model attributes**

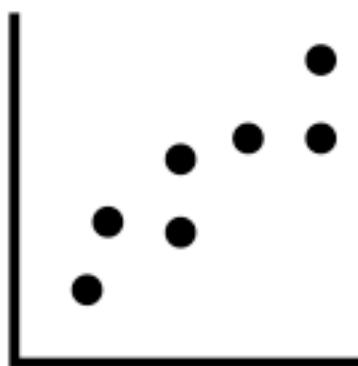
*Bayesian Network (BN) Models*



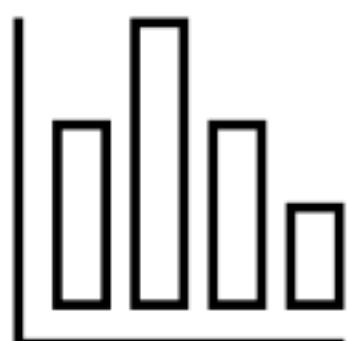
Bayesian Attack Graph (BAG)      Bayesian Impact Graph (BIG)



**Multi-Objective Optimisation**



**Pareto-Optimal Candidate Countermeasure Portfolios**



**Frequency-based heuristics**