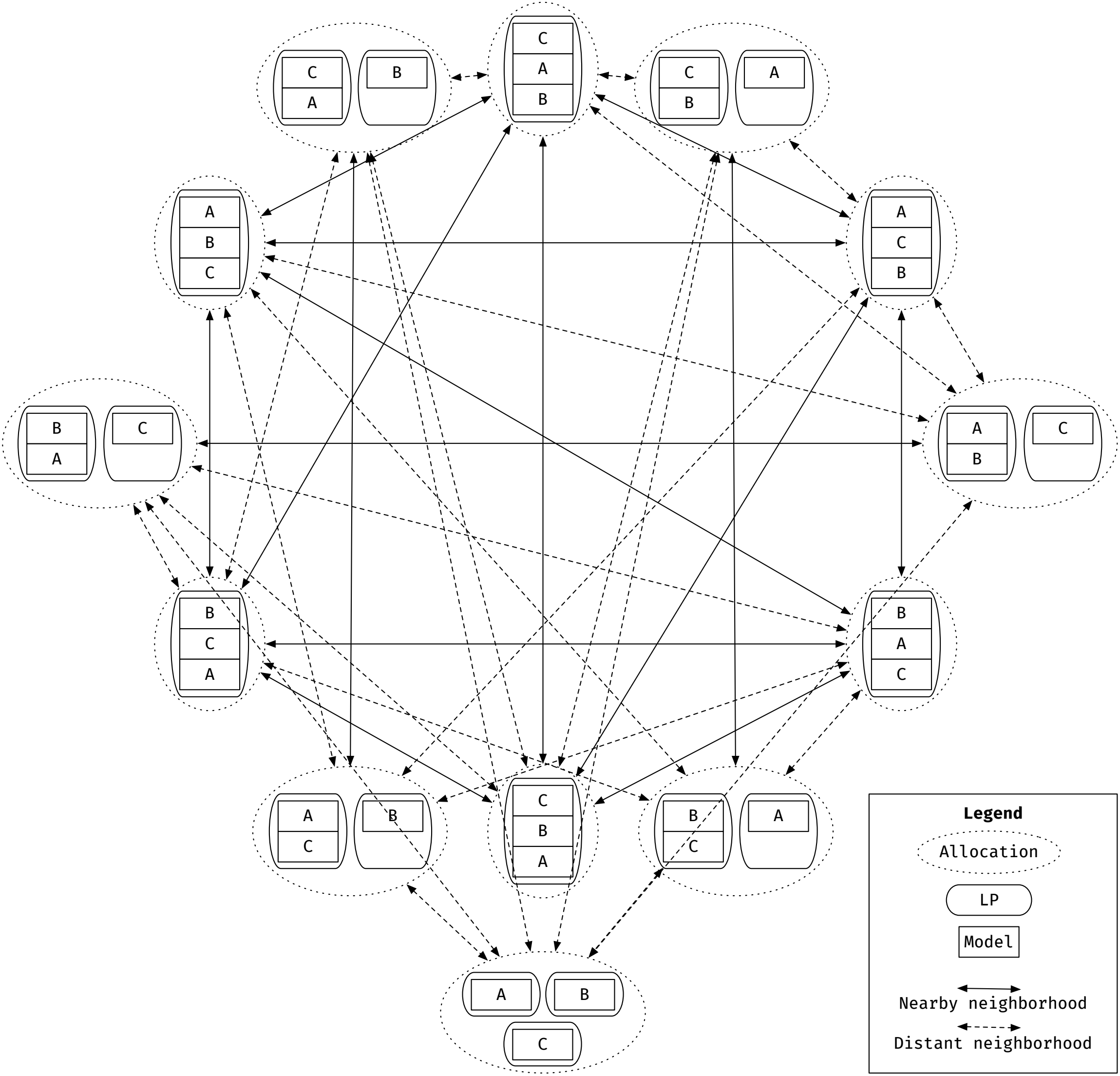
Scheduling of a Cyber-Physical System Simulation

56

Choosing heuristics

Design and implementation of the solution

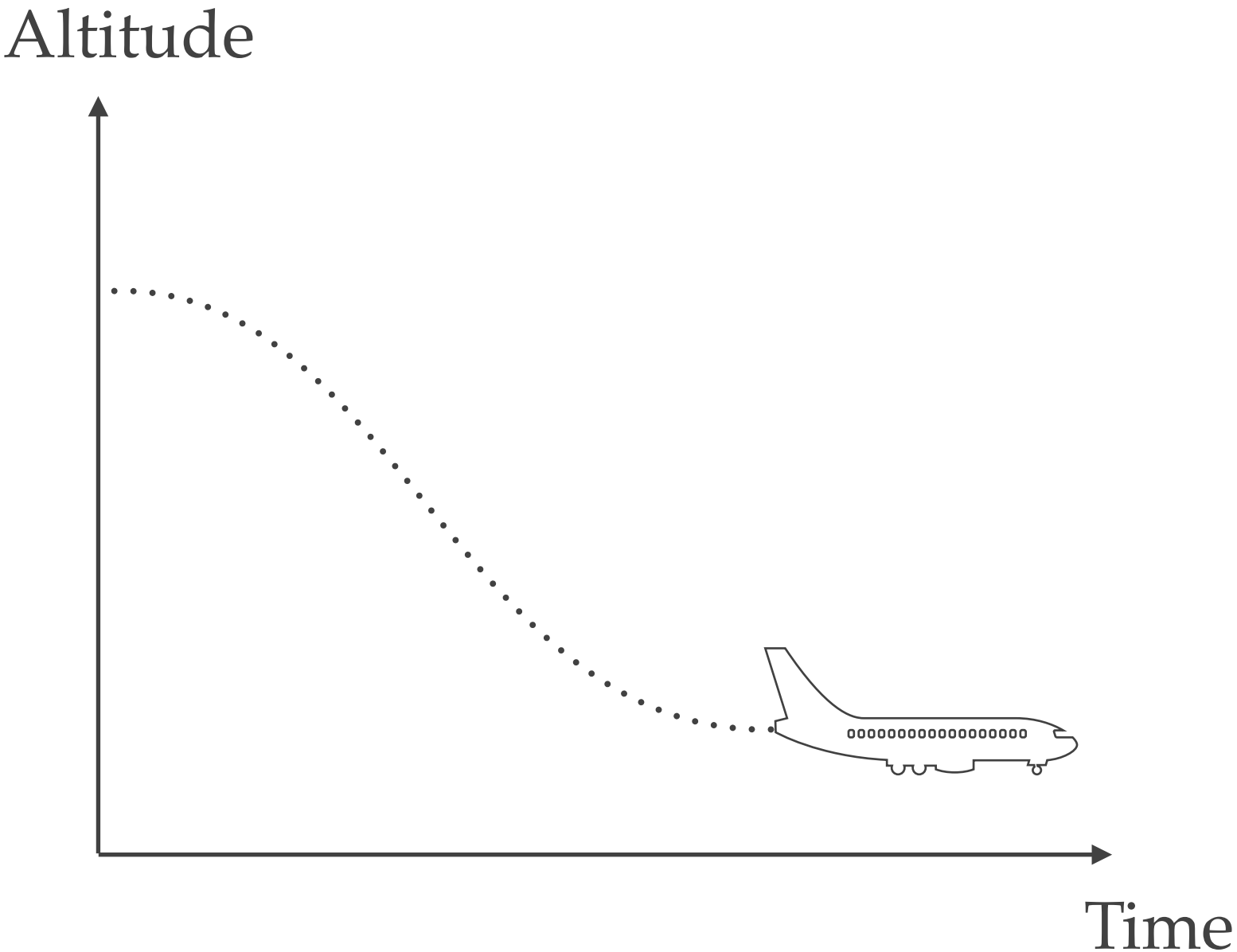
42

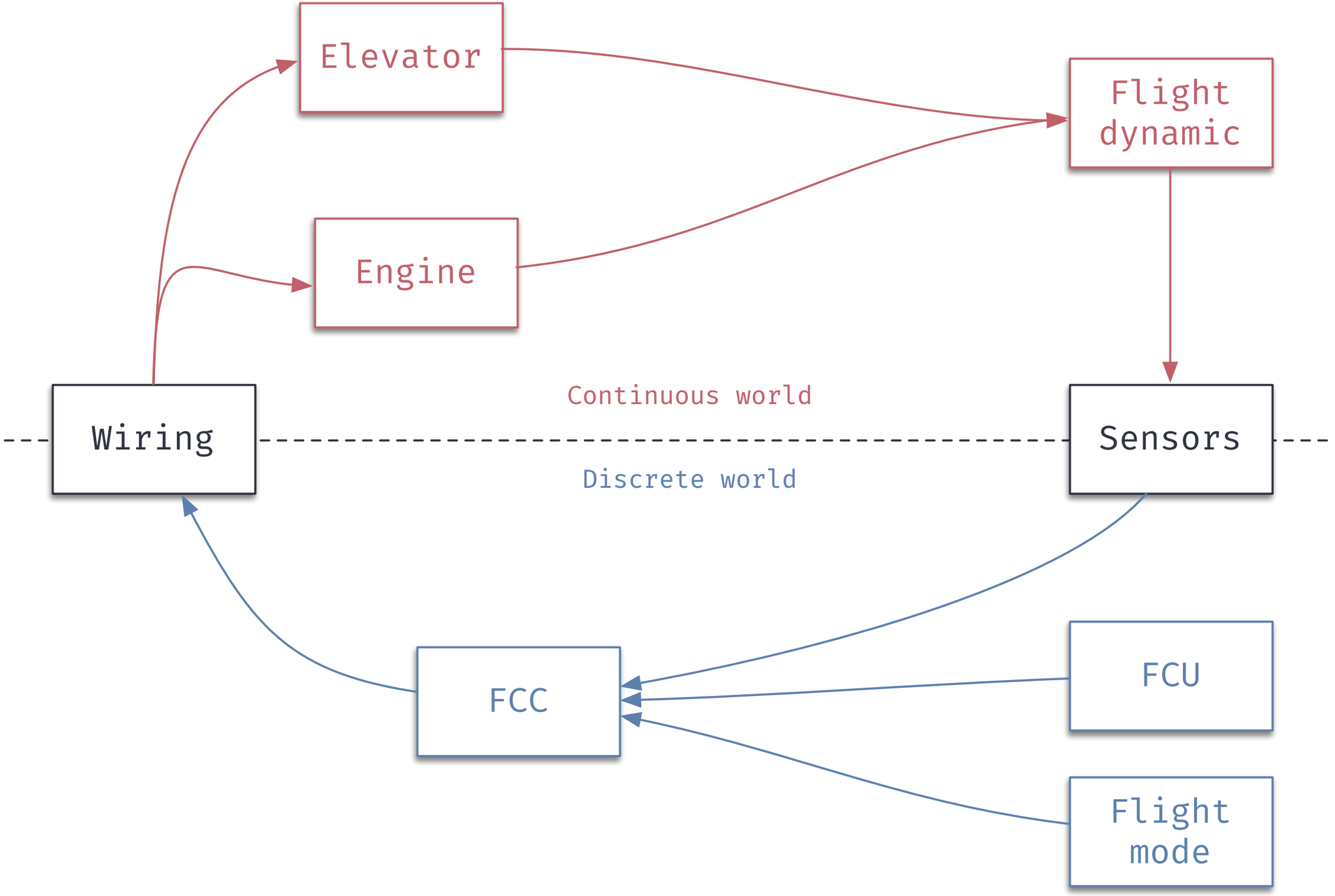


C
A
B
C
A
B
C
B
A
A
B
C
A
C
B
B
A
C
A
B
C
B
C
A
B
A
C
A
C
B
C
B
A
B
C
A
A
B
C
Legend
Allocation
LP
Model
Nearby neighborhood
Distant neighborhood

States	Allocations
Initial state	An allocation
Jumping probabilities	Arbitrary
Number of iterations	Arbitrary
Energy	Function of the respect of the requirements
Neighbourhood	Nearly / distant

Application to case studies


Altitude
Time


Elevator
Flight dynamic
Engine
Continuous world
Wiring
Sensors
Discrete world
FCC
FCU
Flight mode

Research Open-Source Avionics and Control Engineering (ROSACE)

43