

Battery cycling

Early outcome predictor

Training dataset

Multi-armed bandit algorithm (MAB)

Cycling data
(from first
100 cycles)

Voltage



Cycle life

950 670

540 970

Capacity



780 590

730 980

Cycle life
predictions
(from ML
model)

Parameter 3
(CC3)

Parameter 1
(CC1)

Parameter 2
(CC2)

Modify battery
materials &
processes

Recommended charging protocols (CC1, CC2, CC3)

High uncertainty
(exploration)
High cycle life
(exploitation)

