



Adaptive Charging Network Research Portal

CPS: ECCS award# 1932611 PI: Steven Low (Caltech)

Challenge:

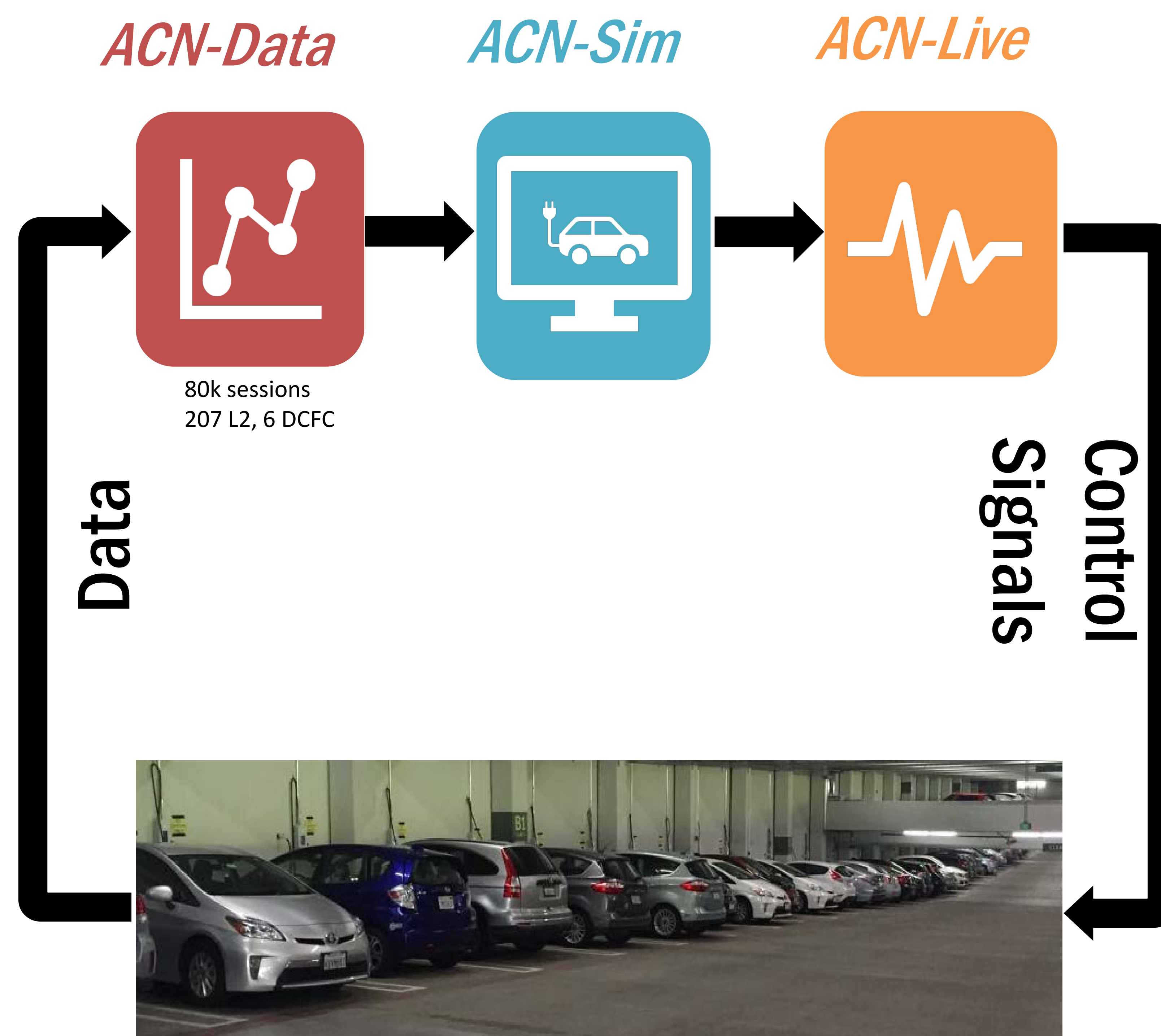
Electric vehicle & smart grid researchers need, but do not have access to, real data, realistic simulators, and live testbed

Solution:

Create ACN Research Portal on top of Adaptive Charging Network at Caltech & JPL

Team:

- Zach Lee (PhD student)
- Sunash Sharma (Schmidt Scholar)
- Christine Ortega (Research Staff)
- PowerFlex, Caltech Facilities
- T Li, B Sun, S Sun, Y Chen, Ye, SURF
- PI: Steven Low



Adaptive Charging Network (Caltech)

ev.caltech.edu

Scientific Impact:

Users of ACN Research Portal (March 2021):

- 137 organizations
- 37 countries

Publications:

- Caltech: 9
- Others: 5

Broader Impact:

- Smart EV charging saves 50-75% in infrastructure & 33% in operating cost
- Transportation and electricity gen emit ~60% of GHG in US
- EVs reduce GHG & help integrate renewables

