## **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)



## Scientific Impact:

# ev.caltech.edu







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