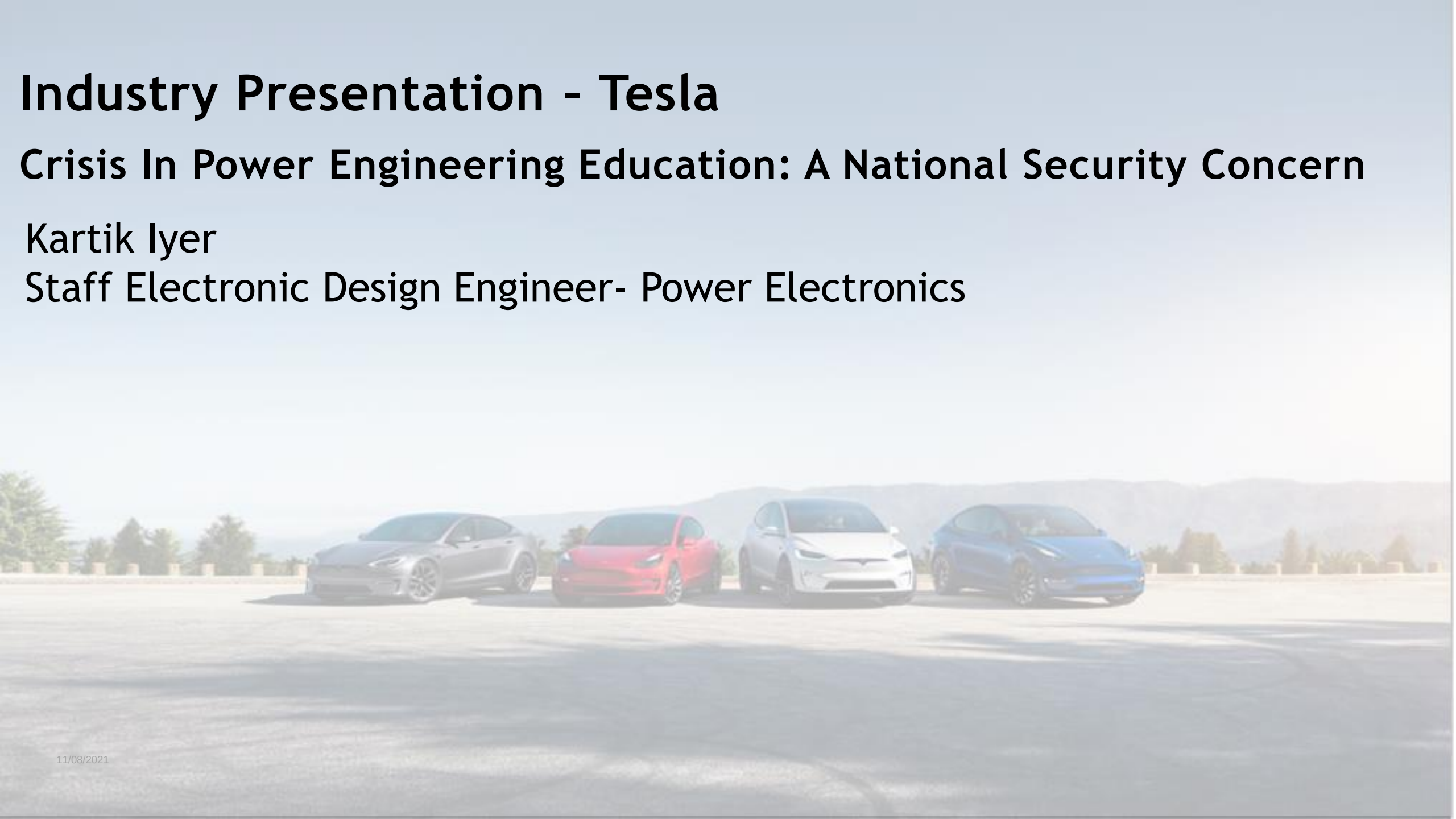
Industry Presentation – Tesla

Crisis In Power Engineering Education: A National Security Concern

Kartik Iyer
Staff Electronic Design Engineer- Power Electronics



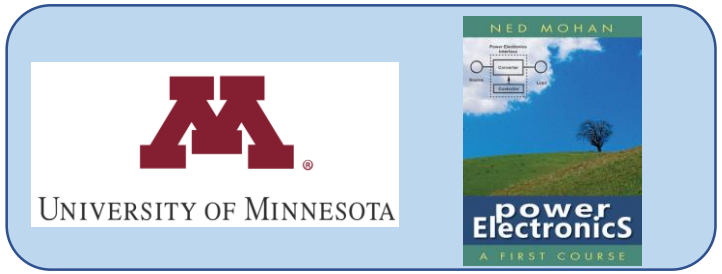
Tesla's Contribution

Tesla's Mission: To accelerate the world's transition to sustainable energy

Background

Internships:
- 2012
- 2015

Masters' Prof. Ned Mohan



Ph.D – Prof. Ned Mohan

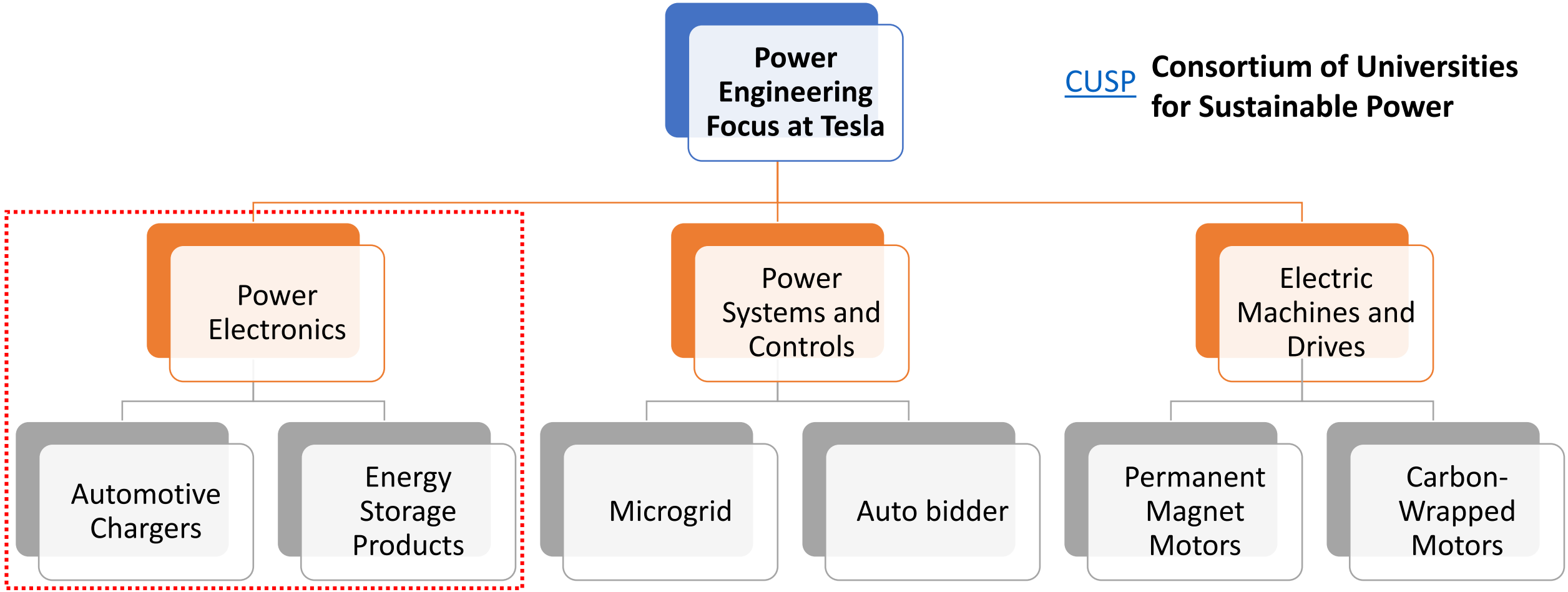
ACADEMIC
PROFESSIONAL
EXPERIENCE

- NIT Surat
- Bachelors'
- Electrical Engineering

Internship:
- 2016

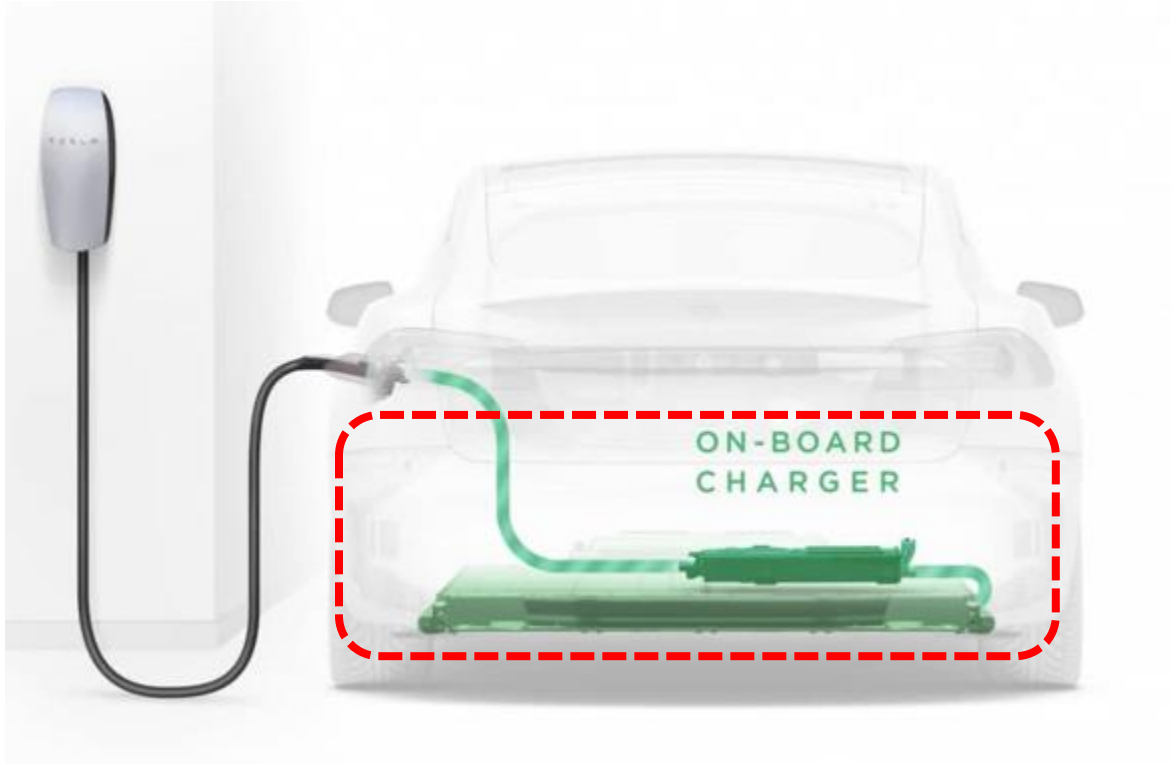
Full-Time
- 2017-Present

Power and Energy Domain Focus At Tesla

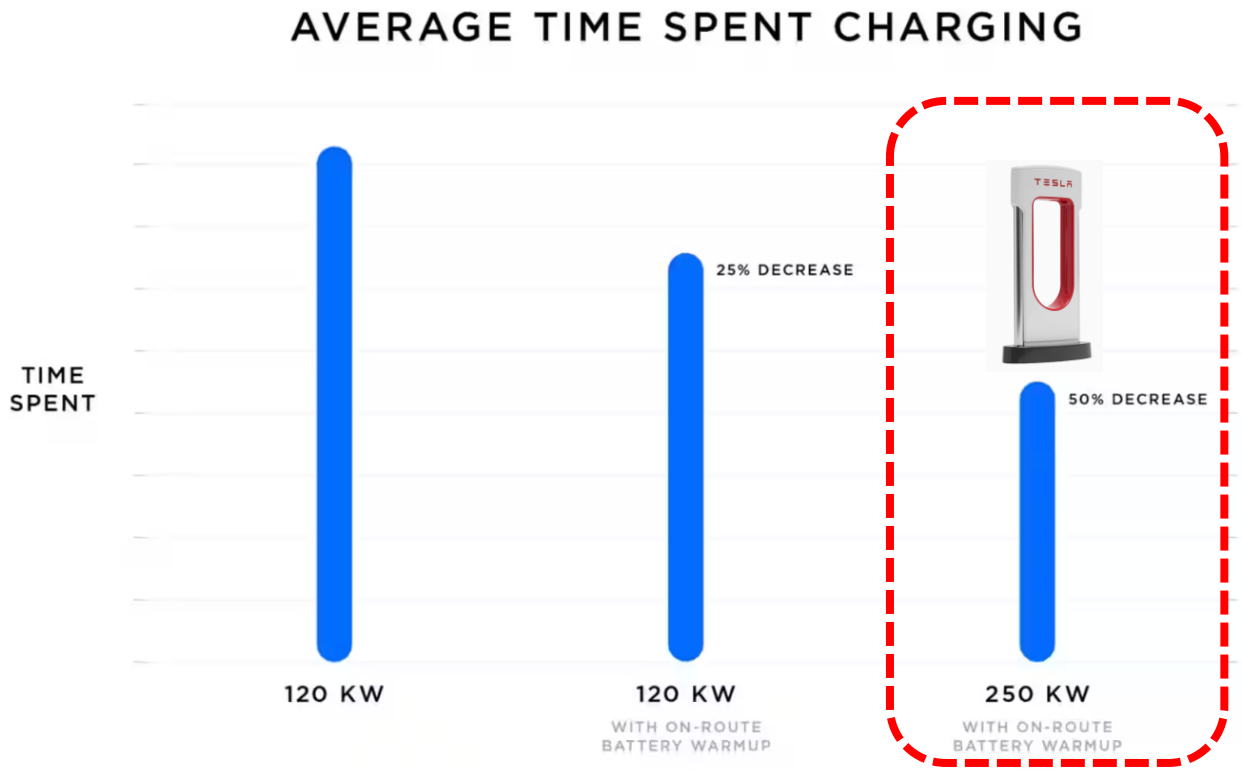


CUSP **Consortium of Universities for Sustainable Power**

Tesla Power Electronics Products (Automotive Chargers)



Vehicle on-board charger (Grid –> Battery)

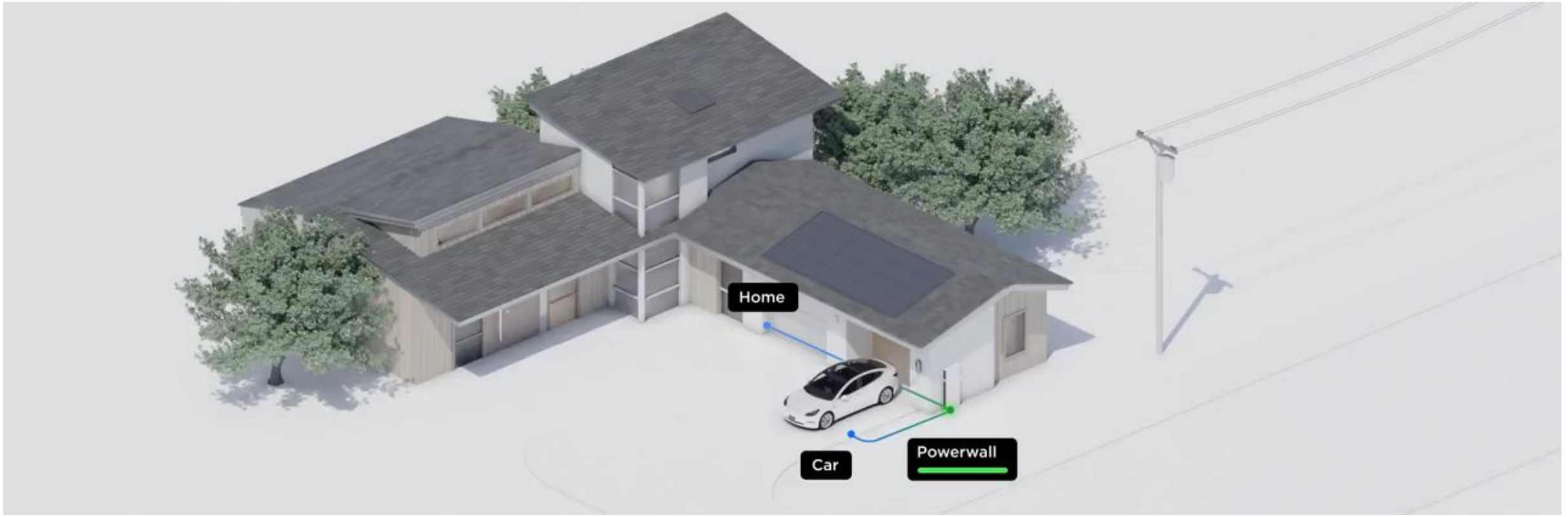


Vehicle V3 SUPERCHARGER (Grid –> Battery)

Tesla Power Electronics Products (Residential Energy Storage)

Store Solar Energy

Tesla Power Electronics Products (Residential Energy Storage)

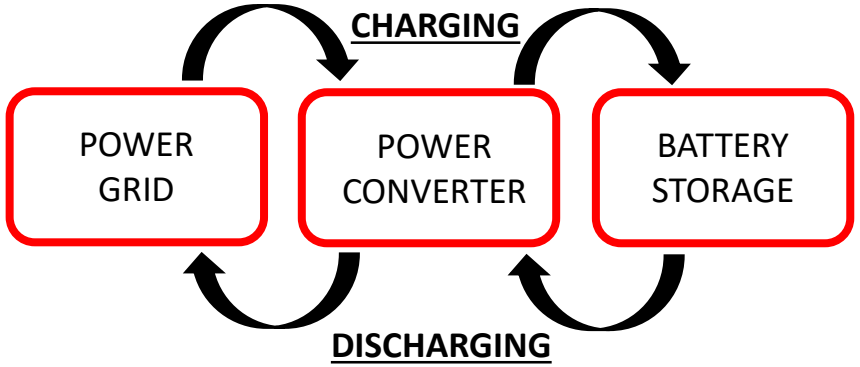


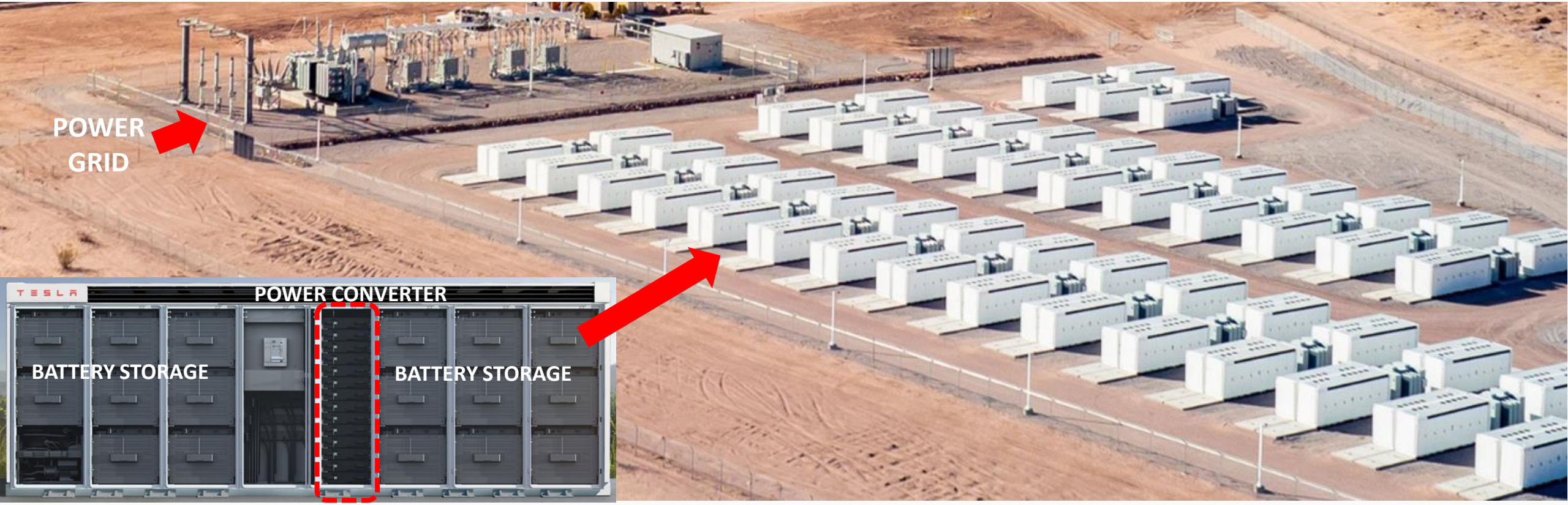
Use Your Stored Energy Day or Night

Tesla Power Electronics Products (Residential Energy Storage)

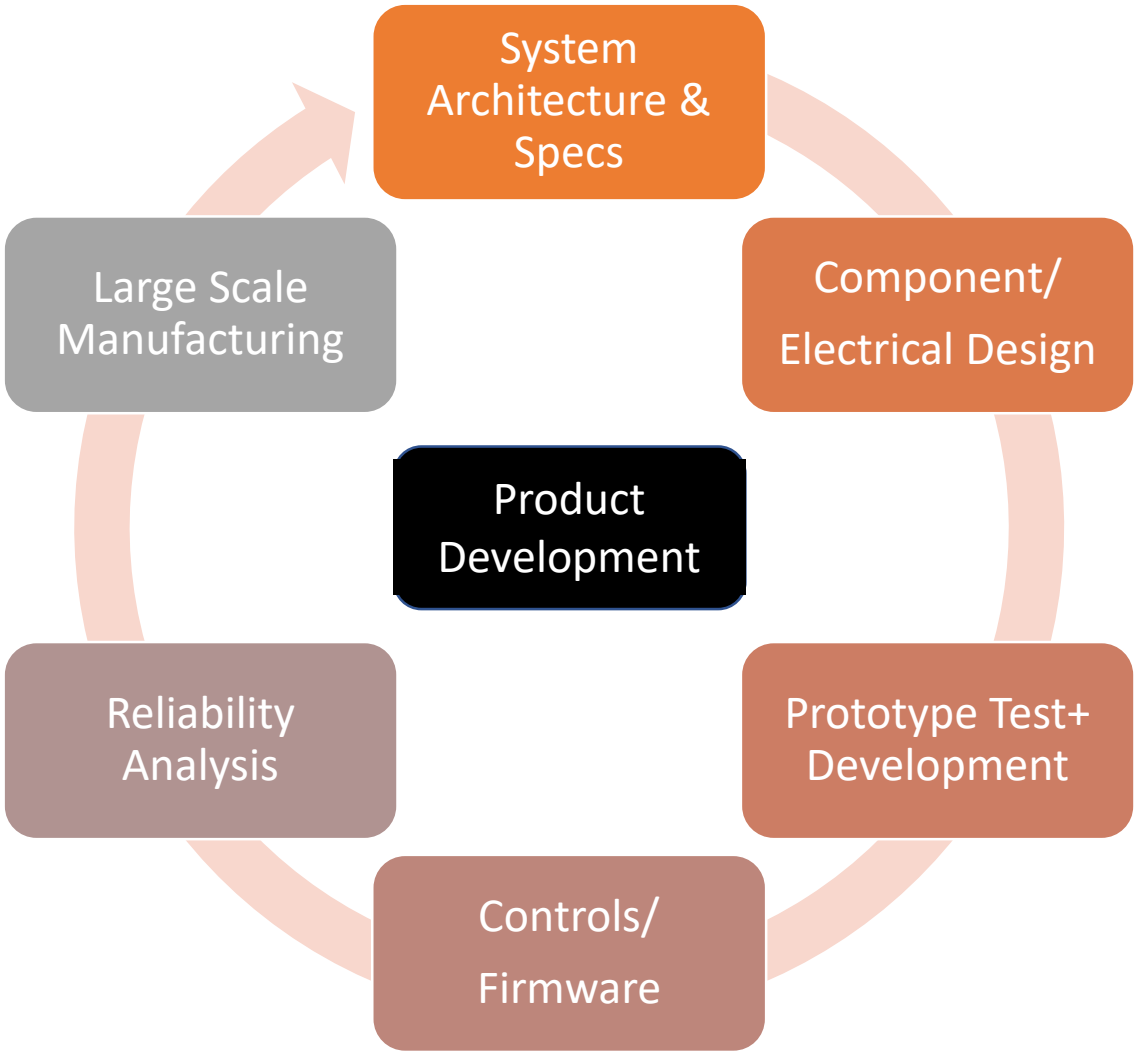
Or when the Power is Out During an Outage

Tesla Power Electronics Products (Commercial Energy Storage)





Tesla Power and Energy Talent Base



Academic/Student Development

Course Curriculum	
System Architecture & Specs	Component/ Electrical Design
Course Lab	
Prototype Test + Development	Controls/Firmware
Internship/Industry Exposure	
Reliability Analysis	Large Scale Manufacturing

Tesla power electronics team

We are hiring!

- Electrical
- Mechanical
- Magnetics
- EMC
- Manufacturing
- Reliability
- Control
- Firmware
- Software