

Crisis in Power Engineering Education: A National Security Concern Minneapolis, MN October 21-22, 2022





Manufacturing

Electric Vehicles, Energy Storage, Renewables, Robotics, Supercomputers

Company Background

- Tesla's Mission: <u>To accelerate the</u> world's transition to sustainable energy
- Tesla's facilities are globally located in
 - North America,
 - Europe,
 - Asia and in
 - Rest of the World.
- Tesla's global employee count is ~100k.
- Tesla primarily has Automotive, Residential and Commercial Energy Storage Products.

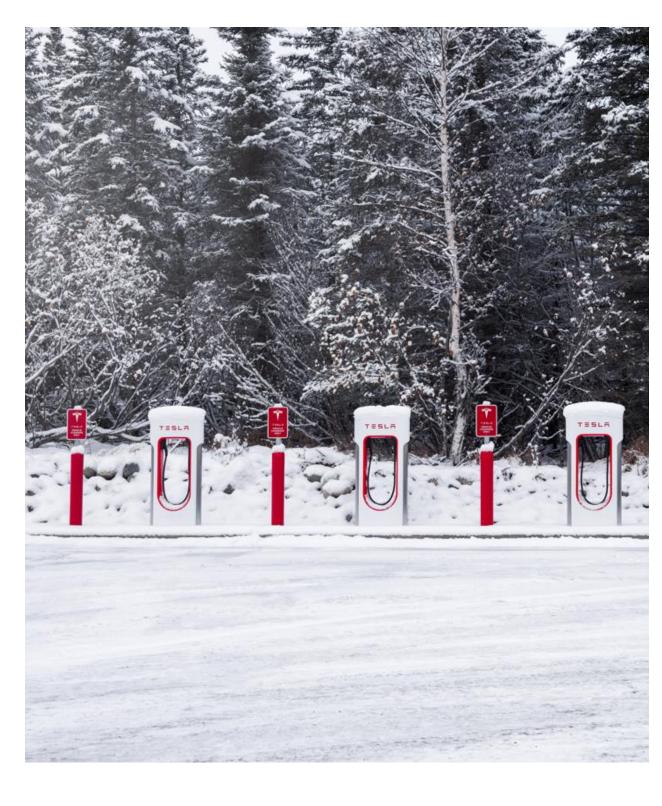
Power and Energy Focus

- All aspects of power engineering are vital for Tesla.
- Power Electronics:
 - Drive Inverters
 - Automotive Chargers
 - Energy Storage Products
- Power Systems and Controls:
 - Microgrid
 - Auto bidder etc.
- Electric Machines And Drives:
 - Permanent Magnet Motor
 - Carbon-Wrapped Motor etc.

Power and Energy Talent Base

- Tesla is a vertically integrated organization.
- Tesla designs and integrates power electronic products for automotive and energy storage.
- Tesla requires talent base in power and energy sector in all domains of product development:
 - System Architecture
 - Design (Electrical; Mechanical; Magnetics)
 - System Integration
 - Reliability
 - Controls/Firmware







Salary and Benefits for EE

- Tesla offers competitive base compensation in line with the rest of the industry.
- In addition, Tesla provide employees and their families benefits like:
 - medical,
 - dental,
 - vision coverage,
 - 401(k)
 - Generous Paid time-off
 - Stock benefits etc.

Growth and Hiring

- Tesla is always seeking for top talent.
- At Tesla, we work on
 - Hard Problems and do
 - Meaningful Work
- Tesla currently has openings in automotive and energy domain both for
 - full-time and
 - Internships
- With sustainability being the need of the hour growth at Tesla is immense.