Internship, Thermal Modeling Engineer, Abuse Functional Safety (Winter/Spring 2026)

Job Category	Engineering & Information Technology
Location	Palo Alto, California
Req. ID	249218
Job Type	Intern/Apprentice

What to Expect
Consider before submitting an application:

This position is expected to start around January 2026 and continue through the Winter/Spring term (ending approximately May 2026) or continuing into Summer 2026 if available and there is an opportunity to do so. We ask for a minimum of 12 weeks, full-time and on-site, for most internships. Our internship program is for students who are actively enrolled in an academic program. Recent graduates seeking employment after graduation and not returning to school should apply for full-time positions, not internships.

International Students: If your work authorization is through CPT, please consult your school on your ability to work 40 hours per week before applying. You must be able to work 40 hours per week on-site. Many students will be limited to part-time during the academic year.

Internship Program at Tesla

The Internship Recruiting Team is driven by the passion to recognize and develop emerging talent. Our year-round program places the best students in positions where they will grow technically, professionally, and personally through their experience working closely with their Manager, Mentor, and team. We provide an experience that allows the intern to experience life at Tesla by including them in projects that are critical to their team's success.

What You'll Do
- Geometry cleaning and meshing in STARCCM for new battery pack architectures
- Characterize and develop 3D abuse models for cells of all form factors going into next generation battery packs
- Thermal modeling to determine risk of thermal runaway propagation in battery packs
- Run part design sensitivities to support design decisions to reduce safety risks in battery packs
- Data analysis using MATLAB to interpret and find key trends in modeling & testing results

What You'll Bring
- Currently pursuing a degree in Mechanical Engineering or a related field
- Proficiency in STAR CCM+ or ANSYS or OpenFOAM or COMSOL
- Experience in CATIA/Solidworks (any CAD software), MATLAB or Python
- Experience in Thermal modeling, Computational Fluid Dynamics (CFD), numerical methods, heat transfer, hands-on testing and experimental work and multi-physics simulations

Compensation and Benefits
Benefits

As a full-time Tesla Intern, you will be eligible for:

- Aetna PPO and HSA plans > 2 medical plan options with $0 payroll deduction
- Family-building, fertility, adoption and surrogacy benefits
- Dental (including orthodontic coverage) and vision plans. Both have an option with a $0 payroll

- Healthcare and Dependent Care Flexible Spending Accounts (FSA)
- 401(k), Employee Stock Purchase Plans, and other financial benefits
- Company Paid Basic Life, AD&D, and short-term disability insurance
- Employee Assistance Program
- Sick time after 90 days of employment and Paid Holidays
- Back-up childcare and parenting support resources
- Voluntary benefits to include: critical illness, hospital indemnity, accident insurance, theft & legal services, and pet insurance
- Commuter benefits
- Employee discounts and perks program

Expected Compensation
$20.00 - $50.00 + benefits

Pay offered may vary depending on multiple individualized factors, including market location, job-related knowledge, skills, and experience. The total compensation package for this position may also include other elements dependent on the position offered. Details of participation in these benefit plans will be provided if an employee receives an offer of employment.

Tesla is an Equal Opportunity employer. All qualified applicants will receive consideration for employment without regard to any factor, including veteran status and disability status, protected by applicable federal, state or local laws.

Tesla is also committed to working with and providing reasonable accommodations to individuals with disabilities. Please let your recruiter know if you need an accommodation at any point during the interview process.

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