

Careers

Simulation Engineer

Department	Manufacturing
Location	Palo Alto, California
Req. ID	44535
Job Type	Full-time

Tesla's Mission is to accelerate the world's transition to sustainable energy.

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Description

Role

The highly motivated individual to lead numerical simulation projects such as virtual reality. The Engineer should have a strong background in computer science and mathematics/physics, and able to understand various aspects of the project and come up with innovative solutions to build the best platform that suits the requirements. Result-oriented achiever able to deliver solid output backed by reliable testing and data.

Responsibilities:

- Develop virtual reality tool
- Integrate virtual reality to product solutions and marketing
- Connect virtual reality to customer data
- In general: be a 3D specialist who understands inputs from physics, mathematics, technology, marketing, production systems in order to deliver the best product to the customer. Be Polyvalent to add value for different kinds of simulations, propose innovative ideas.

Requirements:

- Experience in 3D modelling : CAD. Experience in ray tracing or video game programming, virtual reality systems (goggles) is a big plus. Hands on programming of 3D systems.
- Programming : C++, Python, Java
- Knowledge about computer hardware for high performance computing. Cloud/internet programming preferred.
- Knowledge of TensorFlow and computer vision is a plus.
- Mathematics : minimum mastery of linear algebra, calculus, non-convex optimization. Experience in partial differential equation solving is a plus.
- Physics : minimum mastery of optics, necessary to have general culture in physics.
- Strong ability to solve problems, energy to try new solutions, compare different scenarios to take the best decision.
- Experience with supercomputing systems like CUDA or MPI is strongly preferred.
- Bachelor's degree is minimum, but advanced degree preferred

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About Tesla

Tesla is accelerating the world's transition to sustainable transportation and electricity consumption by designing and manufacturing electric vehicles and energy storage systems. Based in California, Tesla employs more than 13,000 people across four continents, and manufactures cars at our factory in Fremont, California. We are currently constructing the Gigafactory—the world's largest lithium ion battery factory—in Sparks, Nevada, and have begun production of Energy battery storage products.

Tesla currently produces two premium EVs—Model S and Model X—engineered from the ground up to be the world's best car and SUV, respectively. Model S received Motor Trend's prestigious 2013 Car of the Year, and achieved the best safety score of any car ever tested by the NHTSA. The recently released Model X includes the first ever falcon wing doors, as well as Tesla's award-winning electric all-wheel drive powertrain. Both vehicles come with free road trip access to more than 400 Tesla Supercharger stations—the world's fastest EV charging technology. Model 3, our third generation EV, is currently under development.

Tesla produces the Powerwall, a residential battery pack, as well as commercial and utility-grade Powerpack storage systems designed to help reduce electricity costs, smooth consumption and create a more resilient electricity grid.

Tesla is committed to hiring and developing top talent from across the world for any given discipline. Our world-class teams operate with a non-conventional product development philosophy of high inter-disciplinary collaboration, flat organizational structure, and technical contribution at all levels. You will be expected to challenge and to be challenged, to create, and to innovate. These jobs are not for everyone; you must have a genuine passion for producing the best vehicles in the world. Without passion, you will find what we're trying to do too difficult.

Tesla is an equal opportunity employer. All aspects of employment including the decision to hire, promote, discipline, or discharge, will be based on merit, competence, performance, and business needs. We do not discriminate on the basis of race, color, religion, marital status, age, national origin, ancestry, physical or mental disability, medical condition, pregnancy, genetic information, gender, sexual orientation, gender identity or expression, veteran status, or any other status protected under federal, state, or local law.