

Tesla Motors
Location: Palo Alto, CA
Product Security - PKI / Crypto Engineer



The Role:

We are looking for a highly motivated engineer specializing in product security to work on Model S, X and future R&D projects.

For years, car companies have talked about a future of "connected cars". At Tesla, we make it happen. We regularly send over-the-air software updates to our Model S and Model X fleet, seamlessly delivering new features and improvements to our customers. Our mobile applications allow customers to interact with their cars via real-time, low-latency two-way communication. We also build tools for our internal sales, delivery, and service teams. Today, we remotely identify potential vehicle issues before a customer does—and often fix problems remotely, too. To this end, information and product security is of the utmost importance.

As a PKI Product Security Engineer for Tesla, you will be analyzing system services, operating systems, networks and applications from a security perspective and will be a recognized expert at discovering security issues and recommending patches. You will also participate in security audits, risk analysis, vulnerability testing and security reviews to ensure that our software is designed and implemented to the highest security standards.

Responsibilities:

- Ensure Tesla's products are implemented to the highest security standards: Model S / Model X / Model 3 / Powerwall / infrastructure.
- Provide security expertise and drive implementations that advance security at Tesla Motors.
- Review, design and build cryptographic solutions (both in products and core corporate projects).
- Architect and design end to end security solutions for products and corporate CA solutions.
- Build and develop software to interface with HSMs.

Requirements:

- Bachelor's degree in Computer Science, Information Systems, Electrical Engineering, or related technical field, or equivalent experience.
- Expertise in the understanding of PKI concepts (infrastructure & architecture), and cryptography concepts.
- Coding/Scripting experience with common languages.
- Experience implementing PKI in software engineering environments.
- Experience integrating HSM solutions in corporate and software engineering environments.
- Experience implementing, evaluating, and developing cryptographic solutions.

Preferred Qualifications:

- Embedded platforms experience.
- Automotive and Hardware experience.

Equal Employment Opportunity statement (EEO):

Tesla Motors is committed to a policy of equal employment opportunity. We recruit, employ, train, compensate, and promote without regard to race, color, age, sex, ancestry, marital status, religion, national origin, physical or mental disability, sexual orientation, gender identity, medical condition, pregnancy, veteran status, genetic information or any other classification protected by state or federal law.