

Raymond Feng

Company: Tesla

- Intro

-Tesla was founded in 2003 by a group of engineers who wanted to prove that people didn't need to compromise to drive electric .

- What problem are they solving?

-Their mission is to "accelerate the world's transition to sustainable energy." Their message was that electric vehicles can be better, quicker and more fun to drive than gasoline cars. Today, Tesla builds not only all-electric vehicles but also infinitely scalable clean energy generation and storage products. Tesla believes the faster the world stops relying on fossil fuels and moves towards a zero-emission future, the better. Tesla being the only electric car company versus the traditional auto companies makes them distinguished against the competitors.

[-https://www.ebaqdesign.com/blog/mission-statements#7](https://www.ebaqdesign.com/blog/mission-statements#7)

[-https://www.tesla.com/about](https://www.tesla.com/about)

- How does their software engineering team help with that mission or vision?

-The deep knowledge of object-oriented programming/C++ delivered a top of the line electric car and sophisticated auto pilot feature.

- Tech Stack

-Tesla's tech stack was greatly shrunk ever since 2018 and now they currently use Drupal for their CMS(content management system), Modernizr and JQuery 1.10.1 for Javascript Frameworks, PHP 5.6.30 for their Programming Language, Google Tag Manager for Tag Managers, Google Analytics UA for Analytics, Varnish for Cache, and Akamai for CDM (content delivery network).

[-https://www.whatruns.com/website/tesla.com](https://www.whatruns.com/website/tesla.com)

- Tesla's Architecture

- Tesla has revealed its revolutionary new wiring architecture that enables more robot automation in the manufacturing process and uses fewer materials for its upcoming cars like Model Y and Tesla Pickup truck. CEO Elon Musk said that one of their biggest mistakes with their attempt at highly automating the production of the Model 3 was trying to automate tasks that humans are much better at than robots, like manipulating cables.

[-https://electrek.co/2019/07/22/tesla-revolutionary-wiring-architecture-robots-model-y/](https://electrek.co/2019/07/22/tesla-revolutionary-wiring-architecture-robots-model-y/)

[-https://insideevs.com/news/361298/new-tesla-wiring-system-promises-to-cause-a-revolution/](https://insideevs.com/news/361298/new-tesla-wiring-system-promises-to-cause-a-revolution/)

- Languages

- Whilst it's technically correct that Tesla most likely uses the C programming language for their vehicle software, it's worth clarifying that the actual language would be MISRA C which has several constraints on the language to provide better control over its features .

[-https://www.quora.com/What-programming-languages-are-used-at-Tesla](https://www.quora.com/What-programming-languages-are-used-at-Tesla)

[-https://www.quora.com/What-programming-language-does-Tesla-write-Autopilot-in](https://www.quora.com/What-programming-language-does-Tesla-write-Autopilot-in)

- Teams

- Tesla has 71 current team members, including Product Architect & CEO Elon Musk.

[-https://www.crunchbase.com/organization/tesla-motors](https://www.crunchbase.com/organization/tesla-motors)

- Shares

- On February 3, 2020, the price of each stock surged past a record of \$900 per share and \$961 per share the next day thanks to a fourth quarter earnings report last week that topped expectations and a host of Wall Street analysts recently predicting further upside for the stock.

-<https://www.forbes.com/sites/sergeiklebnikov/2020/02/03/heres-why-tesla-stock-just-surged-to-a-record-780-per-share/#68ed1dd5ee79>

- Statistics

-Nearly over \$21 billion USD in revenue in 2018

-https://www.statista.com/topics/2086/tesla/#dossierSummary__chapter1