

30yrs building hard tech

6cos founded / co-founded

400+ Falcon launches, lifetime

7M+ Tesla vehicles delivered

## Summary

Founder and engineer across SpaceX, Tesla, xAI, Neuralink, The Boring Company, and X. 30 years running companies where the product is hard and the supply chain is physical. Long arc: move civilization to multi-planetary, sustainable energy, beneficial AI. Core depth in rocket engineering, mass manufacturing, capital markets, and first-principles problem decomposition.

## Experience

1995 — Present · six companies, one reusable rocket, one mass-market EV

### 1995 Internet era

Zip2 -> X.com -> PayPal. Sold two internet companies before age 32.

### 2002 Space + autos

SpaceX, Tesla, SolarCity. Built physical infrastructure others called impossible.

### 2023 AI era

xAI, Neuralink scaling, X platform ownership. New bet on general intelligence and BCI.

## SpaceX · Space launch · reusable rockets

FOUNDER

- ROLE** Founded SpaceX in 2002 to make humanity multi-planetary. First private company to reach orbit (2008), dock with ISS (2012), land and reuse an orbital-class booster (2015), and fly crew (2020). CEO and Chief Engineer from day one.
- ACTIONS** Vertical integration from propellant to avionics. Merlin and Raptor engines designed in-house. Reusable-booster thesis pursued through 12 failed landings before success. Starship developed publicly with high-cadence prototype testing. Launch cadence scaled from 1 flight per year (2008) to one every 2-3 days (2024).
- IMPACT** Falcon 9: 400+ successful launches, 95%+ reuse rate, cost-per-kg to orbit reduced by a factor of 10 versus legacy providers. Starlink: 7,000+ satellites in orbit, largest constellation ever deployed. SpaceX valued at \$350B (2024 secondary round), now responsible for the majority of US orbital mass launched.

## Tesla · EVs · energy · autonomy

CEO

- ROLE** Joined Tesla as lead investor and chairman in 2004; took over as CEO in 2008 during near-bankruptcy. Built it from a two-car roadster project into the world's most valuable automaker by a factor of two.
- ACTIONS** Scaled Model S -> 3 -> Y via the Master Plan framework, treating each model as capital to fund the next. Built four Gigafactories on three continents. Shipped FSD as a continuously improving software product, not a fixed-version feature. Vertically integrated batteries, motors, silicon, and charging.
- IMPACT** Tesla: 7M+ vehicles delivered lifetime (1.8M in 2023 alone), first EV to cross 20% gross margin, first automaker to cross \$1T market cap. Reshaped the industry such that every major incumbent announced an EV transition strategy within 5 years of Model 3 launch.

## xAI · Frontier AI · foundation models

FOUNDER

- ROLE** Founded xAI in 2023 with a focus on understanding the true nature of the universe. Shipped Grok within 6 months of incorporation, one of the fastest foundation-model companies to production.
- ACTIONS** Built Colossus, a 100,000-H100 GPU supercluster, in 122 days from concept to training start. Integrated Grok directly into X to give the model unique real-time data access and the product a real user base from day one.
- IMPACT** Colossus stood up in 122 days, a pace treated as implausible inside the industry. Grok reached ChatGPT-comparable benchmarks within 18 months of company founding, with xAI valued at \$50B in 2024 funding.

## Neuralink · Brain-computer interfaces · BCI implants

FOUNDER

- ACTIONS** Founded 2016 to build high-bandwidth BCI. Shipped the N1 chip with 1,024 electrodes and a precision surgical robot. Secured FDA Breakthrough Device designation and IDE approval (2023) after five years of primate trials.
- IMPACT** First human implanted January 2024; cursor control in 30 days. Second patient mid-2024, expanding to speech restoration. Valued at \$5B (2023).

First-principles founder across hard tech. Approach: start from the physics, question every received cost assumption, prototype in public. Public reach: 214M followers on X · 125 followers on GitHub.

SpaceX Launch · Starlink · Starship ★ \$350B Tesla EVs · energy · FSD ★ \$900B

**CADENCE** The Falcon 9 booster that landed on 22 December 2015 was the first orbital-class rocket to return intact and fly again. The industry assumption that rockets were expendable was gone within 24 months.

### Judgment & Conviction

<b>1999 Bet on online banking</b> Founded X.com while consumer online banking was niche; merger with Confinity became PayPal. Sold to eBay for \$1.5B, with most of the proceeds recycled into SpaceX and Tesla within 24 months.	<b>2008 CEO during near-bankruptcy</b> Took Tesla CEO during the 2008 crisis, three weeks from insolvency. Closed a Mercedes partnership that funded Model S development, a decision that made every subsequent Tesla product possible.	<b>2015 Committed to reusable boosters</b> Pushed Falcon 9 reusability after 12 consecutive landing failures when board and industry said stop. Succeeded on attempt 13. Reusability is now the assumed baseline across every launch provider.
--	--	---

### Public Impact

<b>X · @elonmusk</b> 214M followers Direct channel to 214M followers. Each engineering post, launch video, or product hint moves markets within hours.	
<b>Selected writing</b> Founder-engineer across six hard-tech companies	<b>Invited talks</b> Founder-engineer across six hard-tech companies
<b>Master Plan Part Deux</b> 2016.07 Tesla blog, 40M+ combined reads; reframed EV strategy for the industry	<b>Making Humans Multi-Planetary</b> 2016.09 IAC Guadalajara · 2016
<b>First Principles Thinking in Engineering</b> 2013.03 TED Talk · 5.6M views on youtube.com	<b>Starship and Mars</b> 2024.04 Starbase Texas · 2024

### Core Skills

<b>ROCKET · ENGINE DESIGN</b>	Led Merlin, Raptor, Starship architecture; first reusable orbital booster shipped by any org.
<b>MANUFACTURING · SCALE</b>	Built Tesla Fremont, Shanghai, Berlin, Austin; SpaceX vehicle assembly from 0 to 100+ launches per year.
<b>CAPITAL · CRISIS MGMT</b>	Closed Daimler investment when Tesla was weeks from insolvency; survived five near-bankruptcies across companies.
<b>PUBLIC COMMUNICATION</b>	214M followers on X; product announcements routinely move the S&P 500 component price of his companies.
<b>FIRST PRINCIPLES · COST</b>	Questioning every accepted cost assumption (rockets, batteries, tunneling) has driven 10× cost reductions across four industries.

### Education

University of Pennsylvania · Wharton · College of Arts & Sciences · B.S. Economics · B.A. Physics · transferred from Queen's University; enrolled in Stanford physics PhD, left after two days 1992 – 1997