

# Elon Musk

**Elon Reeve Musk** FRS<sup>ⓘ</sup> (/ˈiːlɒn/; born June 28, 1971) is a technology engineer and entrepreneur.<sup>[4][5][6]</sup> He holds South African, Canadian, and U.S. citizenship and is the founder, CEO, and chief engineer/designer of SpaceX;<sup>[7]</sup> CEO and product architect of Tesla, Inc.;<sup>[8]</sup> co-founder of Neuralink; founder of The Boring Company;<sup>[9]</sup> and co-founder and initial co-chairman of OpenAI.<sup>[10]</sup> He was elected a Fellow of the Royal Society (FRS) in 2018.<sup>[11][12]</sup> In December 2016, he was ranked 21st on the *Forbes* list of The World's Most Powerful People,<sup>[13]</sup> and was ranked (co-)first on the *Forbes* list of the Most Innovative Leaders of 2019.<sup>[14]</sup> He has a net worth of \$23.6 billion and is listed by *Forbes* as the 40th-richest person in the world.<sup>[3]</sup> He is the longest tenured CEO of any automotive manufacturer globally.<sup>[15]</sup>

Born and raised in Pretoria, South Africa, Musk moved to Canada when he was 17 to attend Queen's University. He transferred to the University of Pennsylvania two years later, where he received a Bachelor's degree in economics from the Wharton School and a Bachelor's degree in physics from the College of Arts and Sciences. He began a Ph.D. in applied physics and material sciences at Stanford University in 1995 but dropped out after two days to pursue an entrepreneurial career. He subsequently co-founded Zip2 with his brother Kimbal, a web software company, which was acquired by Compaq for \$340 million in 1999. Musk then founded X.com, an online bank. It merged with Confinity in 2000, which had launched PayPal the previous year and was bought by eBay for \$1.5 billion in October 2002.<sup>[16][17][18][19]</sup>

In May 2002, Musk founded SpaceX, an aerospace manufacturer and space transport services company, of which he is CEO and lead designer. He joined Tesla, Inc., an electric vehicle manufacturer, in 2004, the year after it was founded,<sup>[16]</sup> and became its CEO and product architect. In 2006, he inspired the creation of SolarCity, a solar energy services company (now a subsidiary of Tesla). In 2015, Musk co-founded OpenAI, a nonprofit research company that aims to promote friendly artificial intelligence. In July 2016, he co-founded Neuralink, a neurotechnology company focused on developing brain–computer interfaces. In December 2016, Musk founded The Boring Company, an infrastructure and tunnel-construction company focussed on tunnels specialized for electric vehicles.

In addition to his primary business pursuits, Musk has envisioned a high-speed transportation system known as the Hyperloop, and has proposed a vertical take-off and landing supersonic jet electric aircraft with electric fan propulsion, known as the Musk electric jet.<sup>[20]</sup> Musk has stated that the goals of SpaceX, Tesla, and SolarCity revolve around his vision to change the world and humanity.<sup>[21]</sup> His goals include reducing global warming through sustainable energy production and consumption, and reducing the risk of human extinction by establishing a human colony on Mars.<sup>[22][23]</sup>

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<div>Elon Musk</div> <div>FRS</div>	
<span></span> <div>Musk at the Royal Society admissions day in London, July 2018</div>	
Born	<div>Elon Reeve Musk</div> June 28, 1971 <div>Pretoria, Transvaal, South Africa</div>
Residence	Bel Air, Los Angeles, California, United States <sup>[1][2]</sup>
Citizenship	<div><div><span><span><span></span></span><span> </span></span>South Africa (1971–present)<div><span><span><span></span></span><span> </span></span>Canada (1989–present)</div><span><span><span></span></span><span> </span></span>United States (2002–present)</div></div>
Education	<div>Queen's University</div> <div>Wharton School of the University of Pennsylvania (BS-Economics)</div> <div>University of Pennsylvania School of Arts and Sciences (BA-Physics)</div>
Occupation	Entrepreneur <span> </span> <b><span>·</span></b> <span> </span> engineer <span> </span> <b><span>·</span></b> <span> </span> philanthropist
Years <span> </span> active	1995–present
Net <span> </span> worth	US\$24 billion (November 2019) <sup>[3]</sup>
Title	Founder, CEO, Lead Designer of SpaceX <div>CEO, Product Architect of Tesla, Inc.</div> <div>Co-founder of Neuralink</div> <div>Founder of The Boring Company</div>

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## Early life

Musk was born on June 28, 1971, in Pretoria, Transvaal, South Africa,<sup>[24]</sup> the son of Maye Musk (née Haldeman), a model and dietitian from Regina, Saskatchewan, Canada,<sup>[25]</sup> and Errol Musk, a South African electromechanical engineer, pilot, and sailor. He has a younger brother, Kimbal (born 1972), and a younger sister, Tosca (born 1974).<sup>[29]</sup> His maternal grandfather, Dr. Joshua Haldeman, was an American-born Canadian.<sup>[30][31]</sup> His paternal grandmother was British, and he also has Pennsylvania Dutch ancestry.<sup>[32][33]</sup> After his parents divorced in 1980, Musk lived mostly with his father in the suburbs of Pretoria,<sup>[32]</sup> a choice made by Musk two years after his parents separated but which he now regrets.<sup>[34]</sup> Musk is estranged from his father who he has referred to as "a terrible human being".<sup>[34]</sup> He has a half-sister<sup>[35]</sup> and a half-brother.<sup>[36]</sup>

During his childhood, Musk was an avid reader.<sup>[37]</sup> At the age of 10, he developed an interest in computing with the Commodore VIC-20.<sup>[38]</sup> He taught himself computer programming and, by the age of 12, sold the code of a BASIC-based video game he created called *Blastar* to *PC and Office Technology* magazine for approximately \$500.<sup>[39][40]</sup> A web version of the game is available online.<sup>[39][41]</sup> His childhood reading included Isaac Asimov's *Foundation* series, from which he drew the lesson that "you should try to take the set of actions that are likely to prolong civilization, minimize the probability of a dark age and reduce the length of a dark age if there is one".<sup>[34]</sup>

Musk was severely bullied throughout his childhood and was once hospitalized when a group of boys threw him down a flight of stairs and then smashed his head into the pavement until he lost consciousness.<sup>[34]</sup> The damage to his nose required corrective surgery.<sup>[37][42]</sup>

Musk attended Waterkloof House Preparatory School and Bryanston High School<sup>[42]</sup> before graduating from Pretoria Boys High School. Although Musk's father insisted that Elon go to college in Pretoria, Musk became determined to move to the United States. As he states, "I remember thinking and seeing that America is where great things are possible, more than any other country in the world."<sup>[43]</sup> Knowing it would be easy to get to the United States from Canada, he moved to Canada against his father's wishes in June 1989, just before his 18th birthday,<sup>[44]</sup> after obtaining a Canadian passport through his Canadian-born mother.<sup>[45][46]</sup>

## Education

In Canada, Musk entered Queen's University in 1989, avoiding mandatory service in the South African military. He left in 1992 to study business and physics at the University of Pennsylvania; he graduated with a Bachelor of Science degree in economics and a Bachelor of Arts degree in physics.<sup>[48][49]</sup>

In 1995, Musk commenced a PhD in energy physics at Stanford University in California. Eager to pursue opportunities in the Internet boom, he dropped out after just two days to launch his first company, Zip2 Corporation.<sup>[50]</sup>

## Career

I do think there’s a good framework for thinking. It is physics. ... What I mean by that is: boil things down to their fundamental truths and reason up from there, as opposed to reasoning by analogy.

Elon Musk, <sup>[47]</sup>

## Zip2

In 1995, Musk and his brother, Kimbal, started Zip2, a web software company, with money raised from a small group of angel investors.<sup>[34]</sup> The company developed and marketed an Internet city guide for the newspaper publishing industry.<sup>[51]</sup> Musk obtained contracts with *The New York Times* and the *Chicago Tribune*<sup>[52]</sup> and persuaded the board of directors to abandon plans for a merger with CitySearch.<sup>[53]</sup> Musk's attempts to become CEO were thwarted by the board.<sup>[37]</sup> Compaq acquired Zip2 for US\$307 million in cash<sup>[37]:109</sup> and US\$34 million in stock options in February 1999.<sup>[54]</sup> Musk received US\$22 million for his 7 percent share from the sale.<sup>[52][37]:109</sup>

## X.com and PayPal

In March 1999, Musk co-founded X.com, an online financial services and e-mail payment company, with US\$10 million from the sale of Zip2.<sup>[44][51][53]</sup> One year later, the company merged with Confinity,<sup>[52][55]</sup> which had a money-transfer service called PayPal. The merged company focused on the PayPal service and was renamed PayPal in 2001. PayPal's early growth was driven mainly by a viral marketing campaign where new customers were recruited when they received money through the service.<sup>[56]</sup> Musk was ousted in October 2000 from his role as CEO (although he remained on the board) due to disagreements with other company leadership, notably over his desire to move PayPal's Unix-based infrastructure to Microsoft Windows.<sup>[57]</sup> In October 2002, PayPal was acquired by eBay for US\$1.5 billion in stock, of which Musk received US\$165 million.<sup>[58]</sup> Before its sale, Musk, who was the company's largest shareholder, owned 11.7% of PayPal's shares.<sup>[59]</sup>

In July 2017, Musk purchased the domain X.com from PayPal for an undisclosed amount, stating that it has sentimental value to him.<sup>[60]</sup>

## SpaceX

In 2001, Musk conceived Mars Oasis, a project to land a miniature experimental greenhouse on Mars, containing food crops growing on Martian regolith, in an attempt to reawaken public interest in space exploration.<sup>[61][62]</sup> In October 2001, Musk travelled to Moscow with Jim Cantrell (an aerospace supplies fixer), and Adeo Ressi (his best friend from college), to buy refurbished Dnepr Intercontinental ballistic missiles (ICBMs) that could send the envisioned payloads into space. The group met with companies such as NPO Lavochkin and Kosmotras; however, according to Cantrell, Musk was seen as a novice and was consequently spat on by one of the Russian chief designers.<sup>[63]</sup> The group returned to the United States empty-handed. In February 2002, the group returned to Russia to look for three ICBMs, bringing along Mike Griffin. Griffin had worked for the CIA's venture capital arm, In-Q-Tel, as well as NASA's Jet Propulsion Laboratory, and was just leaving Orbital Sciences, a maker of satellites and spacecraft. The group had another meeting with Kosmotras and were offered one rocket for US\$8 million. Musk considered the price too high, and stormed out of the meeting. On the flight back from Moscow, Musk realized that he could start a company that could build the affordable rockets he needed.<sup>[63]</sup> According to early Tesla and SpaceX investor Steve Jurvetson,<sup>[64]</sup> Musk calculated that the raw materials for building a rocket actually were only 3 percent of the sales price of a rocket at the time. It was concluded that, in theory, by applying vertical integration and the modular approach employed in software engineering, SpaceX could cut launch price by a factor of ten and still enjoy a 70-percent gross margin.<sup>[65]</sup> Ultimately, Musk ended up founding SpaceX with the long-term goal of creating a true spacefaring civilization.<sup>[66]</sup>



Musk and President Barack Obama at the Falcon 9 launch site in 2010

With US\$100 million of his early fortune,<sup>[67]</sup> Musk founded Space Exploration Technologies, or SpaceX, in May 2002.<sup>[68]</sup> Musk is chief executive officer (CEO) and chief technology officer (CTO) of the Hawthorne, California-based company. By 2016, Musk's private trust held 54% of SpaceX stock, equivalent to 78% of voting shares.<sup>[69]</sup>

SpaceX develops and manufactures space launch vehicles with a focus on advancing the state of rocket technology. The company's first two launch vehicles are the Falcon 1 and Falcon 9 rockets (a nod to Star Wars' *Millennium Falcon*), and its first spacecraft is the Dragon (a nod to *Puff the Magic Dragon*).<sup>[70]</sup> In seven years, SpaceX designed the family of Falcon launch vehicles and the Dragon multipurpose spacecraft. In September 2008, SpaceX's Falcon 1 rocket became the first privately funded liquid-fueled vehicle to put a satellite into Earth orbit.<sup>[37]</sup>

SpaceX is both the largest private producer of rocket engines in the world and holder of the record for the highest thrust-to-weight ratio for a rocket engine (the Merlin 1D).<sup>[71][72]</sup> SpaceX has produced more than 100 operational Merlin 1D engines. Each Merlin 1D engine can vertically lift the weight of 40 average family cars. In combination, the 9 Merlin engines in the Falcon 9 first stage produce anywhere from 5.8 to 6.7 MN (1.3 to 1.5 million pounds) of thrust, depending on altitude.<sup>[73]</sup>

In 2006, SpaceX was awarded a contract from NASA to continue the development and test of the SpaceX Falcon 9 launch vehicle and Dragon spacecraft in order to transport cargo to the International Space Station,<sup>[74]</sup> followed by a US\$1.6 billion NASA Commercial Resupply Services program contract on December 23, 2008, for 12 flights of its Falcon 9 rocket and Dragon spacecraft to the Space Station, replacing the US Space Shuttle after it retired in 2011.<sup>[75]</sup> On May 25, 2012, the SpaceX Dragon vehicle berthed with the ISS, making history as the first commercial company to launch and berth a vehicle to the International Space Station.<sup>[76]</sup> Astronaut transport to the ISS is currently handled solely by the Soyuz, but SpaceX is one of two companies awarded a contract by NASA as part of the Commercial Crew Development program, which is currently projected to develop a US astronaut transport capability by 2020.<sup>[77]</sup>

Musk believed that the key to making space travel affordable is to make rockets reusable, though most experts in the space industry did not believe that reusable rockets were possible or feasible.<sup>[78]</sup> On December 22, 2015, SpaceX successfully landed the first stage of its Falcon rocket back at the launch pad. This was the first time in history such a feat had been achieved by an orbital rocket and was a significant step towards rocket reusability lowering the costs of access to space.<sup>[79]</sup> This first stage recovery was replicated several times in 2016 by landing on an autonomous spaceport drone ship, an ocean-based recovery platform,<sup>[80]</sup> and by the end of 2017, SpaceX had landed and recovered the first



stage on 16 missions in a row where a landing and recovery were attempted, including all 14 attempts in 2017. 20 out of 42 first stage Falcon 9 boosters have been recovered overall since the Falcon 9 maiden flight in 2010.<sup>[81]</sup> In 2017 SpaceX launched 18 successful Falcon 9 flights, more than doubling their highest previous year of 8.<sup>[82]</sup>

On February 6, 2018, SpaceX successfully launched the Falcon Heavy, the fourth-highest capacity rocket ever built (after Saturn V, *Energia* and *N1*) and the most powerful rocket in operation as of 2018. The inaugural mission carried a Tesla Roadster belonging to Musk as a dummy payload.<sup>[83]</sup>

SpaceX began development of the Starlink constellation of low earth orbit satellites in 2015 to provide global internet coverage, with an initial 60 satellites launched on 24 May 2019.

Musk was influenced by Isaac Asimov's *Foundation* series<sup>[84]</sup> and views space exploration as an important step in preserving and expanding the consciousness of human life.<sup>[85]</sup> Musk said that multiplanetary life may serve as a hedge against threats to the survival of the human species.

An asteroid or a super volcano could destroy us, and we face risks the dinosaurs never saw: an engineered virus, inadvertent creation of a micro black hole, catastrophic global warming or some as-yet-unknown technology could spell the end of us. Humankind evolved over millions of years, but in the last sixty years atomic weaponry created the potential to extinguish ourselves. Sooner or later, we must expand life beyond this green and blue ball—or go extinct.

Musk's goal is to reduce the cost of human spaceflight by a factor of 10.<sup>[86]</sup> In a 2011 interview, he said he hopes to send humans to Mars' surface within 10–20 years.<sup>[87]</sup> In Ashlee Vance's biography, Musk stated that he wants to establish a Mars colony by 2040, with a population of 80,000.<sup>[38]</sup> Musk stated that, since Mars' atmosphere lacks oxygen, all transportation would have to be electric (electric cars, electric trains, Hyperloop, electric aircraft).<sup>[88]</sup> Musk stated in June 2016 that the first uncrewed flight of the larger Interplanetary Spaceship was aimed for departure to the red planet in 2022, to be followed by the first crewed ITS Mars flight departing in 2024.<sup>[89]</sup> In September 2016, Musk revealed details of his architecture to explore and colonize Mars.<sup>[90]</sup>

In late 2017, SpaceX unveiled the design for its next-generation launch vehicle and spacecraft system, Big Falcon Rocket (BFR), that would support all SpaceX launch service provider capabilities with a single set of very large vehicles: Earth-orbit, Lunar-orbit, interplanetary missions, and even intercontinental passenger transport on Earth, and totally replace the Falcon 9, Falcon Heavy and Dragon vehicles in the 2020s. Starship will have a 9-meter (30 ft) core diameter. Significant development on the vehicles began in 2017, with an initial prototype unveiled in September 2019,<sup>[91]</sup> while the new rocket engine (Raptor) development began in 2012,<sup>[92][93]</sup> with a first test flight performed in August 2019.<sup>[94]</sup>

In a September 2018 announcement of a planned 2023 lunar circumnavigation mission, a private flight called *#dearMoon project*,<sup>[95]</sup> Musk showed a redesigned concept for the BFR second stage and spaceship with three rear fins and two front canard fins added for atmospheric entry, replacing the previous delta wing and split flaps shown a year earlier. The revised BFR design was to use seven identically-sized Raptor engines in the second stage; the same engine model as would be used on the first stage. The second stage design had two small actuating canard fins near the nose of the ship, and three large fins at the base, two of which would actuate, with all three serving as landing legs.<sup>[96]</sup> Additionally, SpaceX also stated later that September that they were "no longer planning to upgrade Falcon 9 second stage for reusability."<sup>[97]</sup> The two major parts of the re-designed BFR were given descriptive names in November: "Starship" for the upper stage and "Super Heavy" for the booster stage, which Musk pointed out was "needed to escape Earth's deep gravity well (not needed for other planets or moons)."<sup>[98]</sup>

## Tesla

Tesla, Inc. (originally Tesla Motors) was incorporated in July 2003 by Martin Eberhard and Marc Tarpenning, who financed the company until the Series A round of funding.<sup>[99]</sup> Both men played active roles in the company's early development prior to Elon Musk's involvement.<sup>[100]</sup> Musk led the Series A round of investment in February 2004, joining Tesla's board of directors as its chairman.<sup>[101][102][103][104]</sup> All three, along with J. B. Straubel, were inspired by the earlier AC Propulsion tzero electric roadster prototype<sup>[105]</sup>. Musk took an active role within the company and oversaw Roadster product design at a detailed level, but was not deeply involved in day-to-day business operations.<sup>[106]</sup> Following the financial crisis in 2008 and after a series of escalating conflicts in 2007, Eberhard was ousted from the firm.<sup>[78][107]</sup> Musk assumed leadership of the company as CEO and product architect in 2008, positions he still holds today. As of 2019, Elon Musk is the longest tenured CEO of any automotive manufacturer globally.<sup>[108]</sup>

Tesla's master plan, as iterated by Musk in 2006<sup>[109]</sup> was: "Build sports car. Use that money to build an affordable car. Use that money to build an even more affordable car. While doing above, also provide zero emission electric power generation options".



NASA Administrator Charles Bolden congratulates Musk in front of the Dragon capsule in 2012



Elon Musk's Tesla Roadster orbiting earth



Musk explains the capabilities of Starship to NORAD and Air Force Space Command in April 2019

Tesla Motors first built an electric sports car, the Tesla Roadster, in 2008, with sales of about 2,500 vehicles to 31 countries. Tesla began delivery of its four-door Model S sedan on June 22, 2012. It unveiled its third product, the Model X, aimed at the SUV/minivan market, on February 9, 2012; however, the Model X launch was delayed until September 2015.<sup>[110][111][112]</sup> In addition to its own cars, Tesla sold electric powertrain systems to Daimler for the Smart EV, Mercedes B-Class Electric Drive and Mercedes A Class, and to Toyota for the RAV4 EV. Musk was able to bring in both companies as long-term investors in Tesla.<sup>[113]</sup>



Musk observing an assembly demo at the reopening of the NUMMI plant, now known as the Tesla Factory (Fremont, California) in 2010



Musk and Senator Dianne Feinstein next to a Tesla Model S (2010)



Musk standing in front of a Tesla Model S in 2011

Musk favored building a more affordable Tesla model; this led to the Model 3 that was unveiled in 2016, with a planned base price of US\$35,000<sup>[109]</sup>. Initial deliveries began in 2017, with the US\$35,000 base model becoming available in February 2019.<sup>[114][115]</sup>

Several mainstream publications have compared him with Henry Ford for his work on advanced vehicle powertrains.<sup>[116]</sup>

In a May 2013 interview with All Things Digital, Musk said that to overcome the range limitations of electric cars, Tesla planned to expand its network of supercharger stations, tripling the number on the East and West coasts of the U.S. that June, with plans for more expansion across North America, including Canada, throughout the year.<sup>[117]</sup>

In 2014, Musk announced that Tesla would allow its technology patents to be used by anyone in good faith in a bid to entice automobile manufacturers to speed up the development of electric cars. "The unfortunate reality is electric car programs (or programs for any vehicle that doesn't burn hydrocarbons) at the major manufacturers are small to non-existent, constituting an average of far less than 1% of their total vehicle sales," Musk said.<sup>[118]</sup>

In February 2016, Musk announced that he had acquired the Tesla.com domain name from Stu Grossman, who had owned it since 1992, and changed Tesla's homepage to that domain.<sup>[119]</sup>

Anticipating that the global lithium-ion battery supply was insufficient for their planned electric car output, a lithium-ion battery factory that would more than double existing global output was planned<sup>[120]</sup>. On July 29, 2016 the first phase of Gigafactory 1, a lithium-ion battery and electric vehicle subassembly factory, was officially opened near Reno, Nevada, by Tesla in partnership with Panasonic <sup>[121][122]</sup>. Gigafactory 1 currently produces 35 GWh/yr of batteries.

In July 2016, Musk released Tesla's "master plan part 2"<sup>[123]</sup>: "Create stunning solar roofs with seamlessly integrated battery storage. Expand the electric vehicle product line to address all major segments [including small SUV and pickup truck]. Develop a self-driving capability that is 10X safer than manual via massive fleet learning. Enable your car to make money for you when you aren't using it."



Musk with Indian Prime Minister Narendra Modi in San Jose, California, on September 26, 2015

In September 2017, Musk arranged a contract with the government of South Australia for Tesla Energy to install what would then be the world's largest lithium ion battery pack, to help alleviate energy blackouts in the state. Famously, Musk arranged this on twitter, with the guarantee that it would be installed in 100 days or would be free.<sup>[124]</sup> This deadline was achieved <sup>[125]</sup> and the resulting battery exceeded expected performance and returns,<sup>[126]</sup> despite skepticism from Australian federal politicians<sup>[127][128]</sup>.

In September 2018, Musk was sued by the U.S. Securities and Exchange Commission for a tweet claiming that funding had been secured for potentially taking Tesla private. The lawsuit claimed that verbal discussions Musk held with foreign investors in July 2018 did not confirm key deal terms<sup>[129]</sup> and thus characterized the tweet as false, misleading, and damaging to investors, and sought to bar Musk from serving as CEO on publicly traded companies.<sup>[130][131]</sup> Musk called the allegations unjustified and that he had never compromised his integrity.<sup>[132]</sup> Two days later, Musk reached a settlement with the SEC, without admitting or denying the SEC's allegations. As a result, Musk and Tesla were fined \$20 million each, and Musk was forced to step down temporarily as Tesla chairman, while remaining Tesla's CEO.<sup>[133]</sup> Musk also proclaimed in several interviews since that he does not regret sending the tweet that triggered the SEC investigation. According to Reuters, Musk said the tweet was "Worth It".<sup>[134]</sup> According to ABC News, "As recently as Oct. 4 2018, Musk issued a sarcastic tweet, describing the agency [SEC] as the 'Shortseller Enrichment Commission,' despite having agreed to settlement terms a week earlier that his company, Tesla, would monitor his tweets and other communications."<sup>[135]</sup> In a December 2018 interview with CBS's "60 Minutes", Musk stated, "I want to be clear. I do not respect the SEC."<sup>[136]</sup> On February 19, 2019, according to Forbes, Musk stated in a tweet that Tesla would build half a million cars in 2019.<sup>[137]</sup> The SEC

reacted to Musk's tweet by filing in court, initially asking the court to hold him in contempt for violating the terms of settlement agreement with such a tweet, which was disputed by Musk. This was eventually settled by a joint agreement between Musk and the SEC clarifying the previous agreement details.<sup>[138]</sup> The agreement included a list of topics that Musk would need preclearance before tweeting about.<sup>[139]</sup>

In January 2019, Musk traveled to China for the groundbreaking of Tesla's Shanghai Gigafactory, which is the company's first large-scale plant outside the U.S.<sup>[140]</sup> Part of his visit to China, Musk also met the Chinese premier Li Keqiang. During their exchange, Musk expressed his admiration for China and wished he could visit China more often, to which the Chinese premier was quoted as saying "We can issue you a Chinese green card if that helps."<sup>[141][142]</sup> The time from the initial ground-breaking to production of first cars at the Shanghai gigafactory was achieved in under one year.<sup>[143]</sup>

In November 2019, Elon Musk unveiled the Tesla Cybertruck, an all electric battery powered pickup truck. The reveal was in Los Angeles—the same month, year and location that the movie *Blade Runner*, which was a design inspiration, was set in.<sup>[144][145]</sup> To be manufactured in three variants of Single Motor RWD, Dual Motor AWD and Triple Motor AWD, Cybertruck is expected to start commercial production in late 2021.<sup>[146]</sup>

As of January 29, 2016, Musk owned about 28.9 million Tesla shares, which equates to about 22% of the company.<sup>[147][148]</sup> As of 2014, Musk's annual salary is one dollar, similar to that of Steve Jobs and other CEOs; the remainder of his compensation is in the form of stock and performance-based bonuses.<sup>[149][150]</sup> In January 2018, Musk was granted an option to buy up to 20.3 million shares if Tesla's market value were to rise to \$650 billion. Majority shareholder approval was approved in March 2018.<sup>[151]</sup> The grant was also meant to end speculation about Musk's potential departure from Tesla to devote more time to his other business ventures.<sup>[152]</sup> A report by advisory firm Glass Lewis & Co. to its clients argued against granting the options.<sup>[153]</sup>

## SolarCity

Musk provided the initial concept and financial capital for SolarCity, which was then co-founded in 2006 by his cousins Lyndon and Peter Rive.<sup>[154][155]</sup> By 2013, SolarCity was the second largest provider of solar power systems in the United States.<sup>[156]</sup> SolarCity was acquired by Tesla, Inc. in November 2016 and is currently a wholly owned subsidiary of Tesla.<sup>[157][158][159]</sup>

The underlying motivation for funding both SolarCity and Tesla was to help combat global warming.<sup>[160][161]</sup> In 2012, Musk announced that SolarCity and Tesla would collaborate to use electric vehicle batteries to smooth the impact of rooftop solar on the power grid, with the program going live in 2013.<sup>[162]</sup>

On June 17, 2014, Musk committed to building a SolarCity advanced production facility in Buffalo, New York, that would triple the size of the largest solar plant in the United States. Musk stated the plant will be "one of the single largest solar panel production plants in the world," and it will be followed by one or more even bigger facilities in subsequent years.<sup>[163]</sup> The Tesla Gigafactory 2 is a photovoltaic (PV) cell factory, leased by Tesla subsidiary SolarCity in Buffalo, New York. Construction on the factory started in 2014 and was completed in 2017.<sup>[164]</sup> Tesla accepted \$750 million in public funds from New York Governor Andrew Cuomo as part of the Buffalo Billion project—a plan to invest money to help the economy of the Buffalo, New York area—to build the factory and infrastructure.<sup>[165]</sup>

## Hyperloop

On August 12, 2013, Musk unveiled a concept for a high-speed transportation system incorporating reduced-pressure tubes in which pressurized capsules ride on an air cushion driven by linear induction motors and air compressors.<sup>[166]</sup> The mechanism for releasing the concept was an alpha-design document that, in addition to scoping out the technology, outlined a notional route where such a transport system might be built: between the Greater Los Angeles Area and the San Francisco Bay Area.<sup>[167]</sup>

After earlier envisioning Hyperloop, Musk assigned a dozen engineers from Tesla and SpaceX who worked for nine months, establishing the conceptual foundations and creating the designs for the transportation system.<sup>[168][169]</sup> An early design for the system was then published in a whitepaper posted to the Tesla and SpaceX blogs.<sup>[170][171][172]</sup> Musk's proposal, if technologically feasible at the costs he has cited, would make Hyperloop travel cheaper than any other mode of transport for such long distances. The alpha design was proposed to use a partial vacuum to reduce aerodynamic drag, which it is theorized would allow for high-speed travel with relatively low power, with certain other features like air-bearing skis and an inlet compressor to reduce freestream flow. The document of alpha design estimated the total cost of an LA-to-SF Hyperloop system at US\$6 billion, but this amount is speculative.<sup>[173]</sup>

In June 2015, Musk announced a design competition for students and others to build Hyperloop pods to operate on a SpaceX-sponsored mile-long track in a 2015–2017 Hyperloop pod competition. The track was used in January 2017, and Musk also started building a tunnel.<sup>[174]</sup>

Hyperloop One, a company unaffiliated with Musk, had announced that it had done its first successful test run on its DevLoop track in Nevada on July 13, 2017. It was on May 12, 2017, at 12:02 a.m. and had lasted 5.3 seconds, reaching a top speed of 70 mph.<sup>[175]</sup>

On July 20, 2017, Elon Musk announced that he had received verbal government approval to build a hyperloop from New York City to Washington, D.C., stopping in both Philadelphia and Baltimore.<sup>[176]</sup>

## OpenAI

In December 2015, Musk announced the creation of OpenAI, a not-for-profit artificial intelligence (AI) research company. OpenAI aims to develop artificial general intelligence in a way that is safe and beneficial to humanity.<sup>[177]</sup>

By making AI available to everyone, OpenAI wants to "counteract large corporations who may gain too much power by owning super-intelligence systems devoted to profits, as well as governments which may use AI to gain power and even oppress their citizenry."<sup>[178]</sup> Musk has stated he wants to counteract the concentration of power.<sup>[34]</sup> In 2018 Musk left the OpenAI board to avoid possible future conflicts with his role as CEO of Tesla as Tesla increasingly became involved in AI through Tesla Autopilot.<sup>[179]</sup>

However, in an interview with Joe Rogan in September 2018, Musk warned about the dangers of developing artificial intelligence indiscriminately. In January 2019 Mark Harris of *The Guardian* noted that on 23 January the Musk foundation "added a line to its website, stating its support for the "development of safe artificial intelligence to benefit humanity"<sup>[180]</sup>

## Neuralink

In 2016, Musk co-founded Neuralink, a neurotechnology startup company to integrate the human brain with artificial intelligence. The company is centered on creating devices that can be implanted in the human brain, with the eventual purpose of helping human beings merge with software and keep pace with advancements in artificial intelligence. These enhancements could improve memory or allow more direct interfacing with computing devices.<sup>[181]</sup> Musk sees Neuralink and OpenAI as related: "OpenAI is a nonprofit dedicated to minimizing the dangers of artificial intelligence, while Neuralink is working on ways to implant technology into our brains to create mind-computer interfaces."<sup>[34]</sup>

## The Boring Company

On December 17, 2016, while stuck in traffic, Musk tweeted "[I] am going to build a tunnel boring machine and just start digging ..." The company was named 'The Boring Company'.<sup>[182]</sup> On January 21, 2017, Musk tweeted "Exciting progress on the tunnel front. Plan to start digging in a month or so."<sup>[183]</sup> The first tunnel will start on the SpaceX campus,<sup>[184]</sup> The Boring Test Tunnel runs underneath West 120th Street. As of January 26, 2017, discussions with regulatory bodies had begun.<sup>[185]</sup>

In February 2017, the company began digging a 30-foot (9.1 m) wide, 50-foot (15 m) long, and 15-foot (4.6 m) deep "test trench" on the premises of Space X's offices in Los Angeles, since the construction requires no permits.<sup>[186][187]</sup> Musk had said in early 2017 that a 10-fold decrease in tunnel boring cost per mile is necessary for economic feasibility of the proposed tunnel network.<sup>[188]</sup> The tunnel width is optimised for electric vehicles only, which avoids complications of exhaust venting with internal combustion engines <sup>[189]</sup>.



Musk discussing The Boring Company at TED 2017

By late 2018, TBC had active construction, approved plans in place, or an operational tunnel in several areas of the United States: Baltimore,<sup>[190]</sup> Chicago<sup>[191]</sup> and Los Angeles. TBC provided an update on the state of their technology and product line when they opened to the public their first mile-long test tunnel in Hawthorne, California, on 18 December 2018, stating that it has been a proof-of-concept for the technology.<sup>[192][193]</sup> Design is complete for the third-generation Boring TBM, *Pruftrock*, slated to support a 15x improvement in tunneling speed over the existing state of the art, and the machine was claimed to be assembled and begin engineering testing in 2019.<sup>[192]:15:18–15:45</sup>

## pravduh.com

After a string of negative press targeting Tesla caused Musk to become frustrated,<sup>[194]</sup> specifically articles published by Reveal News criticizing Tesla for its factory safety procedures,<sup>[195]</sup> Musk announced on Twitter that he is planning on creating a website where users could rate the truthfulness of specific articles in addition to the credibility of journalists and publications.<sup>[196]</sup> He suggested calling it "Pravda" after a Soviet Union-era Communist Party newspaper of the same name.

This caused backlash from many journalists, claiming that a platform where any user could freely vote on an article's or a journalist's credibility could be prone to abuse.<sup>[197][198]</sup>

After realizing the site "pravda.com" is used by the Ukrainian Internet newspaper Ukrayinska Pravda, Musk bought the site pravduh.com on May 25, 2018.<sup>[199]</sup>

## Tham Luang cave rescue

In July 2018, Musk attempted to provide assistance to rescuers during the Tham Luang cave rescue by arranging for his employees to build a small rescue pod.

Musk, responding to requests for help from Twitter users,<sup>[200]</sup> contacted the Thai government.<sup>[201]</sup> He then arranged for engineers from two of his companies to design a child-sized submarine to help the rescue effort and documented the process via Twitter.<sup>[202][203]</sup> Richard Stanton, leader of the international rescue diving team, also urged Musk to continue construction of the mini-submarine as a back-up, in case flooding worsened.<sup>[204]</sup> Engineers at Musk's companies SpaceX and The Boring Company built the mini-submarine out of a Falcon 9 liquid oxygen transfer tube<sup>[205]</sup> in 8 hours and personally delivered it to Thailand.<sup>[206]</sup>

Named "Wild Boar" after the children's soccer team,<sup>[207]</sup> its design, based on dive team feedback, was a five-foot (1.5 m)-long, twelve-inch (300 mm)-inch wide sealed tube weighing about 90 pounds (41 kg) propelled manually by divers in the front and back with segmented compartments to place diver weights to adjust buoyancy<sup>[208][209]</sup>, intended to solve the problem of safely transporting the children who might have had difficulty learning the scuba skills required to exit the cave on their own without panicking. In case the mini-submarine could not fit through the cave system, Elon Musk also requested Wing Inflatables, a California-based inflatable boat manufacturer, to build inflatable escape pods. The pods were designed, fabricated, and tested in one day before being flown to Thailand.<sup>[210][211]</sup>



By this time, eight of the twelve children had already been rescued (using full face masks and oxygen under anaesthesia<sup>[212][213][214]</sup>) and Thai authorities decided not to use the submarine.<sup>[215][216][217]</sup>

Elon Musk was later awarded a Member of the Order of the Direkgunabhorn by the King of Thailand in March 2019 for his and his team's contributions to the rescue mission.<sup>[218][219]</sup>

### Device viability and backlash

The supervisor of the rescue operation Narongsak Osatanakorn stated that the submarine was "technologically sophisticated, [but] it doesn't fit with our mission to go in the cave,"<sup>[220][221]</sup> Vernon Unsworth, a recreational caver who had been exploring the cave for the past six years and who had played a key advisory role in the rescue, criticized the submarine on CNN as amounting to nothing more than a public relations effort with no chance of success, and that Musk "had no conception of what the cave passage was like"<sup>[222][223][224]</sup> and "can stick his submarine where it hurts". Musk asserted on Twitter that the device would have worked and referred to Unsworth as "pedo guy", causing backlash against Musk.<sup>[225][226]</sup> He subsequently deleted the tweets, along with an earlier tweet in which he told another critic of the device, "Stay tuned jackass."<sup>[226]</sup> On 16 July, Unsworth stated that he was considering legal action in relation to Musk's comments.<sup>[227][228]</sup>

Two days later, Musk issued an apology for his remarks.<sup>[229][230][231][232]</sup> On 28 August 2018, in response to criticism from a writer on Twitter, Musk tweeted "You don't think it's strange he hasn't sued me?"<sup>[233]</sup> The following day, a letter from L. Lin Wood, the rescuer's attorney, dated 6 August, emerged, showing that he had been making preparations for a libel lawsuit.<sup>[234][235]</sup>

At some point, a self-proclaimed private investigator emailed Musk with an offer to "dig deep" into Unsworth's past, which Musk accepted in August 2018;<sup>[236]</sup> the investigator was later revealed to be a convicted felon with multiple counts of fraud.<sup>[237]</sup> On 30 August, using details produced during the alleged investigation,<sup>[238][239]</sup> Musk sent a *BuzzFeed News* reporter who had written about the controversy an email prefaced "off the record". It claimed that Unsworth is a "single white guy from England who's been traveling to or living in Thailand for 30 to 40 years ... until moving to Chiang Rai for a child bride who was about 12 years old at the time" (later stated by Unsworth's partner to be false). On 5 September, the reporter tweeted a screenshot of the email, saying that "Off the record is a two-party agreement," which he "did not agree to".<sup>[240]</sup>

In mid-September, Unsworth filed a defamation suit in Los Angeles federal court.<sup>[241][242]</sup> In his defense, Musk has argued that in slang usage "pedo guy" was a common insult used in South Africa when I was growing up ... synonymous with 'creepy old man' and is used to insult a person's appearance and demeanor." (the Dictionary of Contemporary Slang defines the term "pedo" as "an unpleasant or unfortunate person... adopted as an all-purpose insult...")<sup>[243][244]</sup>.

The defamation case began on December 4, 2019 in Los Angeles, with Unsworth seeking \$190 million in damages.<sup>[245]</sup> During the trial Musk apologized to Unsworth again for the initial tweet. On December 6 the jury found in favor of Musk and that he was not liable; Musk commented: "My faith in humanity is restored."<sup>[246]</sup> Unsworth's lawyer, L. Lin Wood, stated: "The truth vindicated Musk and Unsworth. Our system of justice worked".<sup>[247]</sup>

### Teslaquila

Musk first mentioned Teslaquila in an April Fools tweet in 2018.<sup>[248]</sup> The proposed Tesla-branded tequila appeared to become closer to reality in October 2018 as Tesla filed an "intent to use" trademark application with the U.S. Patent and Trademark Office.<sup>[249]</sup> The trademark is for distilled agave liquor. Musk reaffirmed his intention to release the product with a tweet, featuring a mockup of the bottle, on October 12.<sup>[250]</sup>

Mexico's Tequila Regulatory Council (CRT) has publicly denounced the proposed product, arguing, "If it wants to make Teslaquila viable as a tequila it would have to associate itself with an authorized tequila producer, comply with certain standards and request authorization from Mexico's Industrial Property Institute."<sup>[251]</sup>

### Music

On March 30, 2019, Musk released a rap single to SoundCloud under the username "Emo G Records".<sup>[252]</sup> Titled "RIP Harambe", the track was performed by Yung Jake, written by Yung Jake and Caroline Polachek, and produced by BloodPop.<sup>[253][254]</sup> Within ten days, the song had achieved more than 2,000,000 plays.<sup>[252]</sup>

## Views

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### Political

Politically, Musk has described himself as "half Democrat, half Republican" and "I'm somewhere in the middle, socially liberal and fiscally conservative."<sup>[255]</sup> In 2018, he stated that he was "not a conservative. I'm registered independent [and] politically moderate."<sup>[256]</sup> Prompted by the emergence of self-driving cars and artificial intelligence, Musk has voiced support for a universal basic income;<sup>[257]</sup> he additionally backs direct democracy.<sup>[258]</sup> He has described himself as a socialist, but "not the kind that shifts resources from most productive to least productive, pretending to do good, while actually causing harm" - arguing instead, "true socialism seeks greatest good for all."<sup>[259]</sup> He supports targeting an inclusive tax rate of 40%, prefers consumption taxes to income taxes, and supports the estate tax, as the "probability of progeny being equally excellent at capital allocation is not high."<sup>[260]</sup>

Musk has described the United States as "[inarguably] the greatest country that has ever existed on Earth," describing it as "the greatest force for good of any country that's ever been." Musk believes democracy would not exist any longer if not for the United States, saying that it prevented this disappearance on three occasions through its participation in World War I, World War II and the Cold War. Musk also stated that he thinks



"it would be a mistake to say the United States is perfect, it certainly is not. There have been many foolish things the United States has done and bad things the United States has done."<sup>[261]</sup>

Before the election of Donald Trump as President of the United States, Musk criticized candidate Trump by saying: "I feel a bit stronger that he is probably not the right guy. He doesn't seem to have the sort of character that reflects well on the United States."<sup>[262]</sup> Following Donald Trump's inauguration, Musk expressed approval of Trump's choice of Rex Tillerson as Secretary of State and accepted an invitation to appear on a panel advising President Trump. Regarding his cooperation with Trump, Musk has subsequently commented: "The more voices of reason that the President hears, the better."<sup>[263]</sup> He subsequently resigned from both in June 2017, in protest at Trump's decision to withdraw the United States from the Paris Agreement on climate change.<sup>[264][265]</sup>



Musk speaking alongside former Irish Taoiseach (Prime Minister) Enda Kenny in 2013

In August 2019, Musk came out on Twitter in support of the 2020 Democratic presidential candidate Andrew Yang, whose platform revolves around the ongoing problem of job displacement through technological automation and artificial intelligence. Musk said in a tweet that universal basic income, which Yang supports, is "obviously needed."<sup>[266]</sup>

## Lobbying

In an interview with *The Washington Post*, Musk stated he was a "significant (though not top-tier) donor to Democrats," but that he also gives heavily to Republicans. Musk further stated that political contributions are a requirement in order to have a voice in the United States government.<sup>[267][268]</sup>

A 2012 report from the Sunlight Foundation, a nonpartisan group that tracks government spending, found that since 2002, SpaceX had spent more US\$4 million on lobbying the United States Congress and more than US\$800,000 in political contributions to Democrats and Republicans. The same report said that "SpaceX's campaign to win political support has been systematic and sophisticated," and that "unlike most tech-startups, SpaceX has maintained a significant lobbying presence in Washington almost since day 1." and that "Musk himself has donated roughly US\$725,000 to various campaigns since 2002. In 2004, he contributed US\$2,000 to President George W. Bush's reelection campaign, maxing out (over US\$100,000)<sup>[269]</sup> to Barack Obama's reelection campaign and donated US\$5,000 to Republican Sen. Marco Rubio, who represents Florida, a state critical to the space industry. (...) All told, Musk and SpaceX gave out roughly US\$250,000 in the 2012 election cycle."<sup>[267][270]</sup> Additionally, SpaceX hired former Republican Senate Majority Leader Trent Lott to represent the company, via the Washington-based lobbying group Patton Boggs LLP. Alongside Patton Boggs LLP, SpaceX uses several other outside lobbying firms, who work with SpaceX's own lobbyists.<sup>[271]</sup>

Musk had been a supporter of the U.S. political action committee (PAC) FWD.us, which was started by fellow high-profile entrepreneur Mark Zuckerberg and advocates for immigration reform. However, in May 2013, Musk publicly withdrew his support in protest of advertisements the PAC was running that supported causes like the Keystone Pipeline. Musk and other members, including David O. Sacks, pulled out, criticizing the strategy as "cynical."<sup>[272]</sup> Musk further stated, "we shouldn't give in to the politics. If we give in to that, we'll get the political system we deserve."<sup>[273]</sup>

In December 2013, Sean Becker of the media/political website Mic called Musk a "complete hypocrite," stating that "[for] the 2014 election cycle, Musk has contributed to the Longhorn PAC and the National Republican Congressional Committee — both of which have funded the campaigns of anti-science, anti-environment candidates such as Rep. Michelle Bachman (R-Minn.)."<sup>[273]</sup> Musk has directly contributed to Republican Sen. Marco Rubio, who has been accused of holding similar positions regarding climate change.<sup>[270]</sup>

## Subsidies

Musk has stated that he does not believe the U.S. government should provide subsidies to companies but should instead use a carbon tax to price in the negative externality of air pollution and discourage poor behavior. Musk says that the free market would achieve the best solution, and that producing environmentally unfriendly vehicles should come with its own consequences.<sup>[274]</sup>

Musk's statements have been widely criticized, with Stanford University Professor Fred Turner noting that "if you're an entrepreneur like Elon Musk, you will take the money where you can get it, but at the same time believe as a matter of faith that it's entrepreneurship and technology that are the sources of social change, not the state. It is not quite self-delusion, but there is a habit of thinking of oneself as a free-standing, independent agent, and of not acknowledging the subsidies that one received. And this goes on all the time in Silicon Valley."<sup>[275]</sup> Author Michael Shellenberger argued that "in the case of Musk, it is hard not to read that as a kind of defensiveness. And I think there is a business reason for it. They are dealing with a lot of investors for whom subsidies are not the basis for a long-term viable business, and they often want to exaggerate the speed with which they are going to be able to become independent." Shellenberger continues, "we would all be better off if these entrepreneurs were a bit more grateful, a bit more humble." While journalist and author Jim Motavalli, who interviewed Musk for *High Voltage*, his 2011 book about the electric vehicle industry, speculated that "Elon is now looking at it from the point of view of a winner, and he doesn't want to see other people win because they get government money — I do think there is a tendency of people, once they have succeeded, to want to pull the ladder up after them."<sup>[276]</sup>

In 2015, Musk's statements were subject to further scrutiny when an *LA Times* article claimed that SpaceX, Tesla, SolarCity and buyers of their products had or were projected to receive together an estimated US\$4.9 billion in government subsidies over twenty years. One example given is New York state, which is spending \$750 million to build a solar panel factory in Buffalo which will be leased to SolarCity for \$1 a year. The deal also includes no property taxes for a decade, an estimated \$260 million valuation. Musk employs a former U.S. State Department official as the chief negotiator for Tesla.<sup>[277]</sup>

## Destiny and religion

When asked whether he believed "there was some kind of destiny involved" in humanity's transition to a multi-planetary species, rather than "just physics", Musk responded:

Well, I do. Do I think that there's some sort of master intelligence architecting all of this stuff? I think probably not because then you have to say: "Where does the master intelligence come from?" So it sort of begs the question. So I think really you can explain this with the fundamental laws of physics. You know it's complex phenomenon from simple elements.<sup>[278]</sup>

Musk has stated that he does not pray, or worship any being, although he asked "any entities that [were] listening" to "bless [the] launch" before an important Falcon 1 launch. When asked whether he thought science and religion could co-exist, Musk replied "Probably not."<sup>[279]</sup>

## Extraterrestrial life

Although Musk believes there could be simple life on other planets, he is unsure whether other intelligent life is likely.<sup>[279]</sup> Musk later said that he "hope[s] that there is other intelligent life in the known universe", and stated that it is "probably more likely than not, but that's a complete guess."<sup>[280]</sup>

Musk has also considered the simulation hypothesis as a potential solution to the Fermi paradox:

The absence of any noticeable life may be an argument in favour of us being in a simulation ... Like when you're playing an adventure game, and you can see the stars in the background, but you can't ever get there. If it's not a simulation, then maybe we're in a lab and there's some advanced alien civilization that's just watching how we develop, out of curiosity, like mould in a Petri dish ... If you look at our current technology level, something strange has to happen to civilizations, and I mean strange in a bad way. ... And it could be that there are a whole lot of dead, one-planet civilizations.<sup>[281]</sup>

## Artificial intelligence

Musk has frequently spoken about the potential dangers of artificial intelligence, calling it "the most serious threat to the survival of the human race". During a 2014 interview at the MIT AeroAstro Centennial Symposium, Musk described AI as humanity's largest existential threat, further stating, "I'm increasingly inclined to think that there should be some regulatory oversight, maybe at the national and international level, just to make sure that we don't do something very foolish." Musk described the creation of artificial intelligence as "summoning the demon".<sup>[282][283]</sup>

Despite this, Musk invested in DeepMind, an AI firm, and Vicarious, a company working to improve machine intelligence.<sup>[284]</sup> In January 2015, he donated \$10 million to the nonprofit Future of Life Institute, an organization focused on challenges posed by advanced technologies.<sup>[285]</sup> He was previously the co-chairman of OpenAI, a nonprofit artificial intelligence research company.<sup>[286]</sup>

Musk has said that his investments are "not from the standpoint of actually trying to make any investment return... I like to just keep an eye on what's going on with artificial intelligence. I think there is potentially a dangerous outcome there. There have been movies about this, you know, like *Terminator*. There are some scary outcomes. And we should try to make sure the outcomes are good, not bad."<sup>[284]</sup>

In June 2016, Musk was asked whether he thinks humans live in a computer simulation, to which he answered:

The strongest argument for us probably being in a simulation I think is the following: 40 years ago we had Pong — two rectangles and a dot. That's where we were. Now 40 years later we have photorealistic, 3D simulations with millions of people playing simultaneously and it's getting better every year. And soon we'll have virtual reality, we'll have augmented reality. If you assume any rate of improvement at all, then the games will become indistinguishable from reality, just indistinguishable.<sup>[287]</sup>

Musk's warnings about artificial intelligence have brought him some controversy. He and Facebook founder Mark Zuckerberg have clashed, with the latter calling his warnings "pretty irresponsible".<sup>[288]</sup> Musk responded to Zuckerberg's censure by saying that he had discussed AI with Zuckerberg and found him to have only a limited understanding of the subject. In 2014, Slate's Adam Elkus argued that current AIs were as intelligent as a toddler, and only in certain fields, going on to say that Musk's "summoning the demon" analogy may be harmful because it could result in significant cuts to AI research budgets.<sup>[289]</sup>

The Information Technology and Innovation Foundation (ITIF), a Washington D.C. think-tank, awarded its Annual Luddite Award to "alarmists touting an artificial intelligence apocalypse"; its president, Robert D. Atkinson, complained that Musk and others say AI is the largest existential threat to humanity. Atkinson stated "That's not a very winning message if you want to get AI funding out of Congress to the National Science Foundation."<sup>[290][291][292]</sup> *Nature* sharply disagreed with the ITIF in an April 2016 editorial, siding instead with Musk, and concluding: "It is crucial that progress in technology is matched by solid, well-funded research to anticipate the scenarios it could bring about ... If that is a Luddite perspective, then so be it."<sup>[293]</sup> In a 2015 *Washington Post* editorial, researcher Murray Shanahan stated that human-level AI is unlikely to arrive in the near future, but that nevertheless "the time to start thinking through the consequences is now."<sup>[294]</sup>

## Public transport

At a Tesla event on the sidelines of the Conference on Neural Information Processing Systems in December 2017, Musk stated that:

I think public transport is painful. It sucks. Why do you want to get on something with a lot of other people, that doesn't leave where you want it to leave, doesn't start where you want it to start, doesn't end where you want it to end? And it doesn't go all the time. ... It's a pain in the ass. That's why everyone doesn't like it. And there's like a bunch of random strangers, one of who might be a serial killer, OK, great. And so that's why people like individualized transport, that goes where you want, when you want.<sup>[295]</sup>

Afterwards, he dismissed an audience member's response that public transportation functioned effectively in Japan.<sup>[296][297]</sup>

His comment sparked widespread criticism from both the public and transit experts. Urban planning expert Brent Toderian started the hashtag #GreatThingsThatHappenedonTransit which was widely adopted by Twitter users in order to dispel Musk's notion that everybody hated public transport.<sup>[296][298][299]</sup> Yonah Freemark, an urbanist and journalist specialising in planning and transportation, summarised Musk's views on public transport as "It's terrible. You might be killed. Japanese trains are awful. Individualized transport for everyone! Congestion? Induced demand? Climate change impacts? Unwalkable streets? Who cares!"<sup>[295]</sup>

Jarrett Walker, a known public transport expert and consultant from Portland, said that "Musk's hatred of sharing space with strangers is a luxury (or pathology) that only the rich can afford", referring to the theory that planning a city around the preferences of a minority yields an outcome that usually does not work for the majority.<sup>[300][301][302]</sup> Musk responded with "You're an idiot", later saying "Sorry ... Meant to say 'sanctimonious idiot'."<sup>[303][304][305]</sup> The exchange received a significant amount of media attention and prompted Nobel laureate Paul Krugman to comment on the controversy, saying that "You're an idiot" is "Elon Musk's idea of a cogent argument".<sup>[300][306]</sup>

## Personal life

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### Philanthropy

Musk is chairman of the Musk Foundation, which focuses its philanthropic efforts on providing solar-power energy systems in disaster areas as well as other goals.<sup>[307]</sup> In 2010, the Musk Foundation collaborated with SolarCity to donate a 25-kW solar power system to the South Bay Community Alliance's hurricane response center in Coden, Alabama.<sup>[308]</sup> In July 2011, the Musk Foundation donated US\$250,000 towards a solar power project in Sōma, Japan, a city that had been recently devastated by a tsunami.<sup>[309]</sup>

In July 2014, Musk was asked by cartoonist Matthew Inman and William Terbo, the grandnephew of Nikola Tesla, to donate US\$8 million toward the construction of the Tesla Science Center at Warendenclaffe.<sup>[310]</sup> Ultimately, Musk agreed to donate US\$1 million toward the project and additionally pledged to build a Tesla Supercharger in the museum car park.<sup>[311]</sup>

Musk donated US\$10 million to the Future of Life Institute in January 2015, to run a global research program aimed at keeping artificial intelligence beneficial to humanity.<sup>[312][285][313]</sup>

As of 2015, Musk is a trustee of the X Prize Foundation<sup>[314]</sup> and a signatory of The Giving Pledge.<sup>[315]</sup>

In October 2018, in an effort to help solve the Flint water crisis, Musk and the Musk Foundation donated over \$480,000 to install new water fountains with filtration systems for access to clean water at all Flint, Michigan schools.<sup>[316]</sup>

Musk has also been a top donor for the ACLU.<sup>[317]</sup>

In October 2019, Musk donated US\$1 million to '#TeamTrees' tree planting initiative led by the YouTube community<sup>[note 1]</sup> and in collaboration with Arbor Day Foundation.<sup>[318][319][320]</sup>

### Family

Tosca Musk, Elon's sister, is a filmmaker. She is the founder of Musk Entertainment and has produced various movies.<sup>[321]</sup>

Musk met his first wife, Canadian author Justine Wilson, while both were students at Ontario's Queen's University. They married in 2000 and separated in 2008.<sup>[322]</sup> Their first son, Nevada Alexander Musk, died of sudden infant death syndrome (SIDS) at the age of 10 weeks.<sup>[323]</sup> They later had five sons through in vitro fertilization<sup>[324]</sup> — twins in 2004, followed by triplets in 2006. They share custody of all five sons.<sup>[325]</sup>

In 2008, Musk began dating English actress Talulah Riley, and in 2010, the couple married. In January 2012, Musk announced that he had ended his four-year relationship with Riley,<sup>[28][326]</sup> tweeting to Riley, "It was an amazing four years. I will love you forever. You will make someone very happy one day."<sup>[327]</sup> In July 2013, Musk and Riley remarried. In December 2014, Musk filed for a second divorce from Riley; however, the action was withdrawn.<sup>[328]</sup> The media announced in March 2016 that divorce proceedings were again under way, this time with Riley filing for divorce from Musk.<sup>[329][330]</sup> The divorce was finalized in late 2016.<sup>[331]</sup>

Musk began dating American actress Amber Heard in 2016 but the two split up after one year due to their conflicting schedules.<sup>[332][333]</sup> On May 7, 2018, Musk and Canadian musician Grimes revealed that they had begun dating; they are still together as of December 14, 2019.<sup>[334][335][336]</sup>

### Joe Rogan podcast appearance

In mid-September 2018, Musk appeared on *The Joe Rogan Experience* podcast and discussed various topics for over two hours. Within five days, the appearance had accrued 10 million YouTube views.<sup>[337]</sup> One of the highest profile and controversial aspects of the program was Musk's sampling a single puff from a cigar consisting, Rogan claimed, of tobacco laced with cannabis. To Rogan's enquiry on how often he smoked cannabis, Musk replied: "Almost never. I know a lot of people like weed and that's fine, but I don't find that is very good for

productivity... not for me." *The Washington Post* observed, "In the media's hands, it became a story about Musk's growing instability ..."<sup>[338]</sup> Tesla stock dropped after the incident, which coincided with the confirmation of the departure of Tesla's Vice President of Worldwide Finance earlier that day.<sup>[339]</sup> *Fortune* wondered if the cannabis use could have ramifications for SpaceX contracts with the United States Air Force, though a USAF spokesperson told *The Verge* that there was no investigation being carried out and that the Air Force is still processing the situation.<sup>[340][341]</sup> In an interview on *60 Minutes*, Musk said of the cannabis-smoking incident: "I do not smoke pot. As anybody who watched that podcast could tell, I have no idea how to smoke pot."<sup>[342]</sup>

## Awards and recognition

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- In 2006, Musk served as a member of the United States National Academy of Sciences Aeronautics and Space Engineering Board.<sup>[343]</sup>
- Inc Magazine Entrepreneur of the Year award for 2007 for his work on Tesla and SpaceX.<sup>[344]</sup>
- 2007 Index Design award for his design of the Tesla Roadster.<sup>[345]</sup> Global Green 2006 product design award for his design of the Tesla Roadster, presented by Mikhail Gorbachev.<sup>[346]</sup>
- American Institute of Aeronautics and Astronautics George Low award for the most outstanding contribution in the field of space transportation in 2007/2008. Musk was recognized for his design of the Falcon 1, the first privately developed liquid-fuel rocket to reach orbit.<sup>[347]</sup>
- National Wildlife Federation 2008 National Conservation Achievement award for Tesla and SolarCity. Other 2008 recipients include journalist Thomas Friedman, U.S. Senator Patrick Leahy (D-VT), and Florida Governor Charlie Crist.<sup>[348]</sup>
- National Space Society's Von Braun Trophy in 2008/2009, given for leadership of the most significant achievement in space. Prior recipients include Burt Rutan and Steve Squyres.<sup>[349]</sup>
- Listed as one of *Time's* 100 people who most affected the world in 2010.<sup>[350]</sup>
- The world governing body for aerospace records, Fédération Aéronautique Internationale, presented Musk in 2010 with the highest award in air and space, the FAI Gold Space Medal, for designing the first privately developed rocket to reach orbit. Prior recipients include Neil Armstrong, Burt Rutan of Scaled Composites and John Glenn.<sup>[351]</sup>
- Named as one of the 75 most influential people of the 21st century by *Esquire* magazine.<sup>[85]</sup>
- Recognized as a *Living Legend of Aviation* in 2010 by the Kitty Hawk Foundation for creating the successor to the Space Shuttle (Falcon 9 rocket and Dragon spacecraft). Other recipients include Buzz Aldrin and Richard Branson.<sup>[352]</sup>
- In February 2011, *Forbes* listed Musk as one of "America's 20 Most Powerful CEOs 40 And Under."<sup>[353]</sup>
- In June 2011, Musk was awarded the US\$250,000 Heinlein Prize for Advances in Space Commercialization.<sup>[354]</sup>
- In 2012, Musk was awarded the Royal Aeronautical Society's highest award: a Gold Medal.<sup>[355]</sup>
- In 2013, Musk was named the Fortune Businessperson of the year for SpaceX, SolarCity, and Tesla.<sup>[356]</sup>
- Awarded the President's award for Exploration and Technology of the Explorers Club at the annual gala on March 16, 2014.<sup>[357]</sup>
- In 2015, he was awarded IEEE Honorary Membership.<sup>[358]</sup>
- In June 2016, Business Insider named Musk one of the "Top 10 Business Visionaries Creating Value for the World" along with Mark Zuckerberg and Sal Khan.<sup>[359]</sup>
- In December 2016, Musk was ranked 21st on Forbes list of The World's Most Powerful People.<sup>[13]</sup>
- In May 2017, Musk was awarded the Oslo Business for Peace Award.<sup>[360][361][362][363][364][365]</sup>
- Musk was elected a Fellow of the Royal Society (FRS) in 2018.<sup>[11][12]</sup>
- Musk was awarded as member (fifth class) of the Most Admirable Order of the Direkgunabhorn on 4 March 2019 for his contribution in the rescue at Tham Luang cave, Chiang Rai Province, Thailand.<sup>[366]</sup>
- Musk was listed (co-) first on the Forbes list of the Most Innovative Leaders of 2019.<sup>[14]</sup>

## In popular media

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In *Iron Man 2* (2010), Musk met Tony Stark (Robert Downey Jr.) in a restaurant, and had some brief lines regarding an "idea for an electric jet."<sup>[367]</sup>

In January 2015, Musk made a guest appearance playing himself on *The Simpsons* in an episode titled "The Musk Who Fell to Earth"; the episode poked fun at many of Musk's ideas.<sup>[368]</sup>

In November 2015, Musk appeared in an episode of *The Big Bang Theory*, as himself volunteering at a soup kitchen with Wolowitz.<sup>[369]</sup> Musk also appeared as himself in a November 2017 of *The Big Bang Theory* spin-off prequel series *Young Sheldon*. The successful first landing of a SpaceX Falcon 9 first stage on a drone ship is shown being covered by CNN. This is followed by a scene of Musk alone in his office with the



notebook that young Sheldon mailed NASA in 1989 containing calculations detailing how this feat could be accomplished.<sup>[370]</sup>

Musk was featured in the 2015 environmental documentary *Racing Extinction*, in which a custom Tesla Model S was designed to help project images of critically endangered species onto public buildings, including the Empire State Building and the Vatican.<sup>[371]</sup>

Musk appeared in several episodes of *South Park* including the episode "Members Only", November 2016, which was voiced by himself.

In 2016, Musk appeared as himself in the romantic comedy film *Why Him?* where he was briefly met by one of the main characters, Ned Flemming played by Bryan Cranston, in a bar at a party.<sup>[372]</sup> In December 2016, Robby in *New Girl* refers to saving a life, and when asked who, responds "Do you know who Elon Musk is?".<sup>[373]</sup> Also in 2016, Musk was referenced by Dr. Martin Stein on The CW time-travel TV show *DC's Legends of Tomorrow*. During time travel to the past, Stein meets his younger self and introduced himself as Elon Musk, to disguise his own identity.<sup>[374]</sup>

In October 2017, Musk was mentioned as a historic pioneer on the CBS All Access series *Star Trek: Discovery*. Set in the year 2256, Captain Gabriel Lorca attempts to motivate a scientist on his ship by asking him "How do you want to be remembered in history? Alongside the Wright Brothers, Elon Musk, Zefram Cochrane? Or as a failed fungus expert. A selfish little man who put the survival of his own ego before the lives of others?"<sup>[375][376]</sup> According to a TechCrunch article published the day after the episode aired, this mention is "also interesting because of its notable omission of Amazon and Blue Origin founder Jeff Bezos: This other space entrepreneur is such a big fan of Star Trek that he pitched and succeeded in landing a cameo in *Star Trek Beyond* as an alien being, but he doesn't rate a mention from Lorca among the spaceflight pantheon."<sup>[377]</sup>

In February 2019, Musk co-hosted YouTuber PewDiePie's show "Meme Review" with Justin Roiland at the request of PewDiePie's fans.<sup>[378][379]</sup> In October of the same year, Musk voiced an alternate reality version of himself with tusks, known as "Elon Tusk", in the season four *Rick and Morty* episode "One Crew over the Crewcoo's Morty".<sup>[380]</sup>

## Notes

1. Notable YouTube creators collaborating include MrBeast, Mark Rober, iJustine, The Slow Mo Guys, Marques Brownlee, Hannah Stocking, PewDiePie, The Try Guys, AsapScience, Smarter Every Day, How Ridiculous, Half as Interesting, Life Noggin, It's Okay To Be Smart, and HowToBasic

## References

1. "Billionaire Tesla CEO Elon Musk Buys Neighbor's Home in Bel Air For Million" (<https://www.forbes.com/sites/trulia/2013/11/01/billionaire-tesla-ceo-elon-musk-buys-home/>). *Forbes*. Retrieved November 1, 2013.
2. "Inside Elon Musk's M Bel Air Mansion" (<https://web.archive.org/web/20150207033543/http://www.bloomberg.com/news/videos/b/6e27fcba-309d-494e-b87d-c73fb8bb1750>). *Bloomberg News*. Archived from the original (<https://www.bloomberg.com/news/videos/b/6e27fcba-309d-494e-b87d-c73fb8bb1750>) on February 7, 2015. Retrieved August 21, 2013.
3. "Elon Musk" (<https://www.forbes.com/profile/elon-musk/>). *Forbes*. Retrieved November 12, 2019.
4. Curtis, Sophie (November 10, 2014). "Elon Musk 'to launch fleet of internet satellites'" (<https://www.telegraph.co.uk/technology/news/11220326/Elon-Musk-to-launch-fleet-of-internet-satellites.html>). *The Daily Telegraph*. London. Retrieved June 23, 2015. "Elon Musk, inventor and business magnate"
5. Vance, Ashlee (September 13, 2012). "Elon Musk, the 21st Century Industrialist" (<https://web.archive.org/web/20170426091133/http://www.bloomberg.com/amp/news/articles/2012-09-13/elon-musk-the-21st-century-industrialist>). *Bloomberg BusinessWeek*. Archived from the original (<https://www.bloomberg.com/amp/news/articles/2012-09-13/elon-musk-the-21st-century-industrialist>) on April 26, 2017. Retrieved June 23, 2015.
6. "Engineer in Focus: Elon Musk" (<https://web.archive.org/web/20181119011009/https://www.asme.org/career-education/early-career-engineers/me-today/engineer-in-focus-elon-musk>). *asme.org*. Archived from the original (<https://www.asme.org/career-education/early-career-engineers/me-today/engineer-in-focus-elon-musk>) on November 19, 2018. Retrieved November 4, 2015.
7. Shanklin, Emily (March 27, 2017). "Elon Musk" (<http://www.spacex.com/elon-musk>). *SpaceX*. Retrieved June 17, 2017.
8. "Elon Musk | Tesla" (<https://www.tesla.com/elon-musk>). *www.tesla.com*. Retrieved September 7, 2018.
9. "Elon Musk's Next Venture to Tackle Traffic Is Totally 'Boring'" (<http://fortune.com/2016/12/18/elon-musk-traffic-boring/>). *Fortune*. Retrieved March 8, 2019.
10. "Introducing OpenAI" (<https://blog.openai.com/introducing-openai/>). *OpenAI Blog*. December 12, 2015. Retrieved March 8, 2019.
11. "Distinguished scientists elected as Fellows and Foreign Members of the Royal Society" (<https://royalsociety.org/news/2018/05/distinguished-scientists-elected-fellows-royal-society-2018>). *Royalsociety.org*. Retrieved May 10, 2018.
12. "Elon Musk" (<https://royalsociety.org/people/elon-musk-13829/>). *Royalsociety.org*. Retrieved May 10, 2018.
13. "The World's Most Powerful People" (<https://www.forbes.com/sites/davidewalt/2016/12/14/the-worlds-most-powerful-people-2016/#26ec03f2368d>). *Forbes*. December 2016. Retrieved December 14, 2016.
14. "America's Most Innovative Leaders" (<https://www.forbes.com/lists/innovative-leaders/#55480e0526aa>). August 28, 2019. Retrieved November 10, 2019.
15. "Industry Shift: With Four Departures This Year, Who Is The Longest-Tenured Automotive CEO?" (<https://finance.yahoo.com/news/industry-shift-four-departures-longest-190424759.html>). July 8, 2019.
16. LaMonica, Martin (September 21, 2009). "Tesla Motors founders: Now there are five" (<https://www.cnet.com/news/tesla-motors-founders-now-there-are-five/>). *CNET*.
17. Kumparak, Greg; Burns, Matt; Escher, Anna (January 4, 2013). "A Brief history of Tesla" (<https://techcrunch.com/gallery/a-brief-history-of-tesla>). *Tech Crunch*. San Francisco, California: Verizon Media. Retrieved April 21, 2014. "Tesla was founded not by Elon Musk, but rather by Martin Eberhard and Marc Tarpenning in July 2003. The two bootstrapped the fledgling auto company until Elon Musk led the company's million Series A financing round in February 2004, when Musk became the company's Chairman of the Board."
18. Hardv. Quentin: Bilton. Nick (March 16. 2014). "Start-Ups Aim to Conquer Space Market" (<https://www.nvtimes.com/2014/03/17/tech>

- nology/start-ups-aim-to-conquer-space-market.html). *The New York Times*. New York City: New York Times Company. Retrieved April 21, 2014. "Space Exploration Technologies, or Space X, started by the Tesla founder Elon Musk"
19. Tobak, Steve (April 11, 2014). "Trust Your Own Focus Group of One" (<http://www.entrepreneur.com/article/232954>). Entrepreneur.com. Retrieved April 21, 2014. "Elon Musk, founder of PayPal, Tesla and SpaceX"
20. Charlton, Jonathan. "Elon Musk 'Toying' with Designs for Electric Jet" (<http://www.aviation.com/general-aviation/elon-musk-toying-designs-electric-jet/>). *Aviation.com*. Retrieved May 30, 2015.
21. "The mind behind Tesla, SpaceX, SolarCity ... | Elon Musk" (<https://www.youtube.com/watch?v=IgKWPdJWuBQ>) – via [www.youtube.com](http://www.youtube.com).
22. Andersen, Ross (September 30, 2014). "Elon Musk puts his case for a multi-planet civilisation" (<https://aeon.co/essays/elon-musk-puts-his-case-for-a-multi-planet-civilisation>). *Aeon*. Retrieved February 21, 2016.
23. "Elon Musk - the Future of Energy & Transport at Oxford Martin School" (<https://www.youtube.com/watch?v=c1HZlQliu0A>). November 22, 2012. Retrieved December 7, 2019.
24. "Elon Musk (South African entrepreneur)" (<http://www.britannica.com/EBchecked/topic/1676437/Elon-Musk>). Britannica Online Encyclopedia. Retrieved December 23, 2012.
25. His Biography author (<https://twit.tv/shows/triangulation/episodes/203/>)Ashlee Vance interviewed on the TV show Triangulation on the TWIT.tv network, discussion of his family starts around the 15th minute
26. Friend, Tad (2009). "Plugged In" (<https://books.google.com/books?id=UaAeAQAAMAAJ&q=Maye+Musk+elon+father&dq=Maye+Musk+elon+father>). *The New Yorker*. 85 (23–30): 53. Retrieved December 23, 2012.
27. Masia, Seth (May 2011). "A Family Leads to the Installer Universe" (<http://www.solartoday-digital.org/solartoday/201105/?pg=22>). Solar Today. Retrieved December 23, 2012.
28. Elliott, Hannah (March 3, 2012). "At Home With Elon Musk: The (Soon-to-Be) Bachelor Billionaire" (<https://www.forbes.com/sites/hannahelliott/2012/03/26/at-home-with-elon-musk-the-soon-to-be-bachelor-billionaire/>). *Forbes*. Retrieved August 12, 2013.
29. [25][26][27][28]
30. Keating Jr., Joseph C. (September 1995). "Joshua N Haldeman, DC: the Canadian Years, 1926-1950". *The Journal of the Canadian Chiropractic Association*. PMC 2485067 (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2485067>).
31. "Tweet" (<https://twitter.com/elonmusk/status/828300245998116864>). February 5, 2017.
32. Hall, Dana (April 11, 2014). "Rocket Man: The otherworldly ambitions of Elon Musk" ([http://www.mercurynews.com/business/ci\\_25541126/rocket-man-otherworldly-ambitions-elon-musk](http://www.mercurynews.com/business/ci_25541126/rocket-man-otherworldly-ambitions-elon-musk)). *San Jose Mercury News*. Retrieved April 14, 2014.
33. Elliott, Hannah (March 26, 2012). "At Home With Elon Musk: The (Soon-to-Be) Bachelor Billionaire" (<https://www.forbes.com/sites/hannahelliott/2012/03/26/at-home-with-elon-musk-the-soon-to-be-bachelor-billionaire/>). *Forbes*. New York City: Forbes Media. Retrieved May 30, 2015.
34. Strauss, Neil (November 15, 2017). "Elon Musk: The Architect of Tomorrow" (<https://www.rollingstone.com/culture/features/elon-musk-inventors-plans-for-outer-space-cars-finding-love-w511747>). *Rolling Stone*. Retrieved November 15, 2017.
35. Hull, Dana; May, Patrick (April 10, 2014). "2014: Rocket Man: The otherworldly ambitions of Elon Musk" (<https://www.mercurynews.com/2014/04/10/2014-rocket-man-the-otherworldly-ambitions-of-elon-musk/>). *The Mercury News*. San Jose, California: Digital First Media. Retrieved January 21, 2018.
36. Crilly, Rob (March 25, 2018). "Elon Musk's father has baby with step-daughter he has known since she was four" (<https://www.telegraph.co.uk/news/2018/03/25/elon-musks-father-has-baby-step-daughter-has-known-since-four/>). *The Telegraph*. London, England: Telegraph Media Group. Retrieved March 26, 2018.
37. Vance, Ashlee (2015). *Elon Musk: Tesla, SpaceX, and the Quest for a Fantastic Future*. New York City: Ecco Press. ISBN 978-0062301239.
38. Grubb, Jeff (April 7, 2015). "How games helped make Elon Musk the real-life Tony Stark" (<https://venturebeat.com/2015/04/07/how-games-helped-make-elon-musk-the-real-life-tony-stark/>). *VentureBeat*. San Francisco, California: VentureBeat, Inc. Retrieved January 12, 2019.
39. O'Kane, Sean (June 9, 2015). "Play the PC game Elon Musk wrote as a pre-teen" (<https://www.theverge.com/2015/6/9/8752333/elon-musk-blastar-pc-game>). *The Verge*. New York City: Vox Media. Retrieved January 12, 2019.
40. Belfiore, Michael (2007). "Chapter 7: Orbit on a Shoestring". *Rocketeers* ([https://archive.org/details/rocketeershowvis00belf\\_0/page/166](https://archive.org/details/rocketeershowvis00belf_0/page/166)). New York City: HarperCollins. pp. 166–95 ([https://archive.org/details/rocketeershowvis00belf\\_0/page/166](https://archive.org/details/rocketeershowvis00belf_0/page/166)). ISBN 978-0-06-114902-3.
41. "Blastar for HTML5" (<https://blastar-1984.appspot.com>). *blastar-1984.appspot.com*. Retrieved November 4, 2015.
42. Etheridge, Jenna (July 23, 2017). "Bryanston High School saddened by Elon Musk bullying" (<https://www.news24.com/SouthAfrica/News/Bryanston-High-School-saddened-by-Elon-Musk-bullying-20150723>). *news24.com*.
43. Elon Musk, quoted in "Elon Musk Profiled: Bloomberg Risk Takers," [www.bloomberg.com](http://www.bloomberg.com), August 3, 2013
44. "37 Interesting Facts about Elon Musk, One of the Most Innovative Entrepreneurs of Our Time" (<http://www.boomsbeat.com/articles/323/20140214/50-things-you-probably-didnt-know-about-elon-musk.htm>). *BoomsBeat.com*. February 14, 2014. Retrieved June 10, 2015.
45. Davis, Johnny (August 4, 2007). "One more giant leap" (<https://www.telegraph.co.uk/culture/3666994/One-more-giant-leap.html>). *The Daily Telegraph*. London, England: Telegraph Media Group. Retrieved November 1, 2013.
46. van Diggelen, Alison (February 7, 2013). "Iron Man, Growing up in South Africa" (<http://www.freshdialogues.com/2013/02/07/transcript-of-elon-musk-interview-with-alison-van-diggelen-iron-man-growing-up-in-south-africa>). *Fresh Dialogues*. Retrieved November 1, 2013. "I actually filled out the forms for her and got her a Canadian passport, and me too. Within three weeks of getting my Canadian passport, I was in Canada."
47. "Elon Musk: First Principles" (<https://www.youtube.com/watch?v=bLv9MGsUt6g>) – via [www.youtube.com](http://www.youtube.com).
48. Hull, Dana (April 11, 2014). "Timeline: Elon Musk's accomplishments" ([http://www.mercurynews.com/business/ci\\_25541448/timeline-elon-musk-accomplishments](http://www.mercurynews.com/business/ci_25541448/timeline-elon-musk-accomplishments)). Retrieved June 11, 2015 – via Mercury News.
49. Zanerhaft, Jaron (2013). "Elon Musk: Patriarchs and Prodigies" (<http://csq.com/2013/01/elon-musk-patriarchs-and-prodigies/>). *CSQ. C-Suite Quarterly*. Retrieved June 11, 2015.
50. "Elon Musk" (<https://www.biography.com/people/elon-musk-20837159>). *Biography*. Retrieved November 3, 2018.
51. Friedman, Josh (April 22, 2003), "Entrepreneur Tries His Midas Touch in Space" (<http://www.globalsecurity.org/org/news/2003/030422-space01.htm>), *Los Angeles Times*
52. "Elon Musk Biography" (<http://www.notablebiographies.com/news/Li-Ou/Musk-Elon.html#b>). *Advameg*. August 23, 2005.

53. Kidder, David; Hoffman, Reid (2013). *The Startup Playbook: Secrets of the Fastest Growing Start-Ups from the founding Entrepreneurs*. San Francisco, CA: Chronicle Books. pp. 224–228. ISBN 978-1452105048.
54. Junnarkar, Sandeep (February 16, 1999). "Compaq buys Zip2" ([http://news.cnet.com/Compaq+buys+Zip2/2100-1023\\_3-221675.html](http://news.cnet.com/Compaq+buys+Zip2/2100-1023_3-221675.html)). *CNET*.
55. Jackson, Erik (2004). *The PayPal Wars*. Los Angeles, California: World Ahead Publishing. pp. 40, 69, 130, 163.
56. Musk, Elon (October 8, 2003). *Success Through Viral Marketing: PayPal* (<https://web.archive.org/web/20150107040733/http://ecorne.r.stanford.edu/authorMaterialInfo.html?mid=379>). *Entrepreneurial Thought Leaders Lecture*. Archived from the original (<http://ecorner.stanford.edu/authorMaterialInfo.html?mid=379>) on January 7, 2015. Retrieved January 6, 2015.
57. "The PayPal Mafia" (<http://fortune.com/2007/11/13/paypal-mafia/>). *Fortune*. Retrieved July 4, 2015.
58. "SEC 10-K" (<http://www.shareholder.com/Common/Edgar/1065088/891618-03-1538/03-00.pdf>) (PDF). eBay. December 31, 2002.
59. "SEC 10-K" (<https://www.sec.gov/Archives/edgar/data/1103415/000091205702009834/a2073071z10-k405.htm>). PayPal. December 31, 2001.
60. Musk, Elon [@elonmusk] (July 10, 2017). "Thanks PayPal for allowing me to buy back X.com ! No plans right now, but it has great sentimental value to me" (<https://twitter.com/elonmusk/status/884580654117076992>) (Tweet) – via Twitter.
61. McKnight, John Carter (September 25, 2001). "Elon Musk, Life to Mars Foundation" (<http://www.spaceref.com/news/viewsr.html?pid=3698>). *Mars Now, a weekly column*. Space Frontier Foundation.
62. Musk, Elon. "Risky Business" (<https://web.archive.org/web/20160108144324/http://spectrum.ieee.org/aerospace/space-flight/risky-business>). *IEEE Spectrum*. Archived from the original (<http://www.spectrum.ieee.org/aerospace/space-flight/risky-business>) on January 8, 2016. Retrieved April 27, 2014.
63. Vance, Ashlee (May 14, 2015). "Elon Musk's space dream almost killed Tesla" (<https://www.bloomberg.com/graphics/2015-elon-musk-spacex/>). *Bloomberg L.P.* Retrieved June 7, 2015.
64. "How Steve Jurvetson Saved Elon Musk" (<http://www.businessinsider.com/steve-jurvetson-spacex-elon-musk-2012-9>). *Business Insider*. September 14, 2012.
65. *SpaceX and Daring to Think Big – Steve Jurvetson* (<https://www.youtube.com/watch?v=3aXNWGwis4w>). YouTube. January 28, 2015.
66. Musk, Elon (September 8, 2006). "SpaceX wins NASA competition to replace Space Shuttle" ([http://www.spacex.com/updates\\_archive.php?page=0606-1206#COTS\\_update](http://www.spacex.com/updates_archive.php?page=0606-1206#COTS_update)). SpaceX.
67. Wayne, Leslie (February 5, 2006). "A Bold Plan to Go Where Men Have Gone Before" (<https://www.nytimes.com/2006/02/05/business/yourmoney/05rocket.html>). *The New York Times*. Retrieved February 16, 2015.
68. *California Business Search (C2414622 - Space Exploration Technologies Corp)* (<https://businesssearch.sos.ca.gov/>)
69. Lambert, Fred (November 16, 2016). "Elon Musk's stake in SpaceX is actually worth more than his Tesla shares" (<https://electrek.co/2016/11/16/elon-musk-stake-spacex-tesla-shares/>). *Electrek*. Retrieved November 17, 2016.
70. SpaceX (<http://www.spacex.com>)
71. "Is SpaceX Changing the Rocket Equation?" (<http://www.airspacemag.com/space/is-spacex-changing-the-rocket-equation-132285884/?page=2>). *airspacemag.com*. Retrieved May 30, 2015.
72. Clark, Stephen. "100th Merlin 1D engine flies on Falcon 9 rocket – Spaceflight Now" (<http://spaceflightnow.com/2015/02/22/100th-merlin-1d-engine-flies-on-falcon-9-rocket/>). Retrieved June 30, 2016.
73. "SpaceX completes 100th Merlin 1D Engine" (<http://www.spacex.com/news/2014/10/16/spacex-completes-100th-merlin-1d-engine>). *SpaceX*. Retrieved April 19, 2015.
74. COTS 2006 Demo Competition ([http://www.nasa.gov/offices/c3po/about/cots\\_demo\\_competition.html](http://www.nasa.gov/offices/c3po/about/cots_demo_competition.html)). NASA (accessed August 26, 2014); and announcement "Commercial Orbital Transportation Services Demonstrations" ([http://www.nasa.gov/pdf/225439main\\_COTS%20Final%20Announcement%20%28Amend%201,%20%202-17-06%29.pdf](http://www.nasa.gov/pdf/225439main_COTS%20Final%20Announcement%20%28Amend%201,%20%202-17-06%29.pdf)). January 18, 2006 (accessed August 26, 2014)
75. "NASA Awards Space Station Commercial Resupply Services Contracts" ([http://www.nasa.gov/home/hqnews/2008/dec/HQ\\_C08-069\\_ISS\\_Resupply.html](http://www.nasa.gov/home/hqnews/2008/dec/HQ_C08-069_ISS_Resupply.html)). *nasa.gov*. NASA. December 23, 2008. Retrieved June 30, 2016.
76. Harwood, William (May 31, 2012). "SpaceX Dragon returns to Earth, ends historic trip" ([http://www.cbsnews.com/8301-205\\_162-57444590/spacex-dragon-returns-to-earth-ends-historic-trip/?tag=cbsnewsSectionContent.10](http://www.cbsnews.com/8301-205_162-57444590/spacex-dragon-returns-to-earth-ends-historic-trip/?tag=cbsnewsSectionContent.10)). CBS News. Retrieved August 3, 2013.
77. Grush, Loren (October 10, 2019). "Elon Musk and NASA administrator claim SpaceX could fly its first crew in the first part of 2020" (<https://www.theverge.com/2019/10/10/20908382/spacex-nasa-elon-musk-jim-bridenstine-commercial-crew-dragon-astronauts-update>). *The Verge*.
78. Schilling, Melissa (2018). *Quirky: The remarkable story of the traits, foibles, and genius of breakthrough innovators who changed the world*. PublicAffairs.
79. "SpaceX rocket in historic upright landing" (<https://www.bbc.co.uk/news/science-environment-35157782>). *BBC News*. Retrieved June 30, 2016.
80. O'Kane, Sean (May 27, 2016). "SpaceX successfully lands a Falcon 9 rocket at sea for the third time" (<https://www.theverge.com/2016/5/27/11787532/spacex-falcon-9-rocket-landing-success-sea-drone-ship>). *The Verge*. New York City: Vox Media. Retrieved June 30, 2016.
81. Henry, Caleb (December 22, 2017). "SpaceX concludes 2017 with fourth Iridium Next launch" (<http://spacenews.com/spacex-concludes-2017-with-fourth-iridium-next-launch/>). *SpaceNews*. Retrieved December 25, 2017.
82. Wall, Mike (December 22, 2017). "Used SpaceX Rocket Launches 10 Communications Satellites Once Again" (<https://www.space.com/39184-spacex-used-rocket-satellite-launch-landing.html>). *Space.com*. Retrieved December 25, 2017.
83. Gebhardt, Chris (February 9, 2018). "Falcon Heavy success paves the way for open access to space beyond Earth – NASASpaceFlight.com" (<https://www.nasaspaceflight.com/2018/02/falcon-heavy-success-paves-space-beyond-earth/>). *NASASpaceFlight.com*. Retrieved February 19, 2018.
84. Carroll, Rory (July 17, 2013). "Elon Musk's mission to Mars" (<https://www.theguardian.com/technology/2013/jul/17/elon-musk-mission-mars-spacex>). *The Guardian*. Guardian Media Group. Retrieved July 23, 2013.
85. "75 most influential people: Elon Musk" (<http://www.esquire.com/features/75-most-influential/elon-musk-1008>). *Esquire*. New York City: Hearst Corporation. September 30, 2008. Retrieved January 12, 2019.
86. "Space Exploration Technologies Corporation Press Release" (<https://web.archive.org/web/20130623215759/http://www.spacex.com/press.php?page=20100616>). SpaceX. Archived from the original (<http://www.spacex.com/press.php?page=20100616>) on June 23, 2013. Retrieved December 15, 2012.
87. "Elon Musk: I'll Put a Man on Mars in 10 Years" (<https://web.archive.org/web/20110902234053/http://www.marketwatch.com/video/asset/elon-musk-ill-put-a-man-on-mars-in-10-years-2011-04-22/CCF1FC62-BB0D-4561-938C-DF0DFFAD15BA>). *Market Watch*. New

87. "Elon Musk puts a man on Mars in 10 years 2011-04-22/CCF1FC62-BB0D-4561-938C-DF0DEFAD15BA) on September 2, 2011. Retrieved December 1, 2011.
88. *Elon Musk speaks at the Hyperloop Pod Award Ceremony (2016.1.30)* (<https://www.youtube.com/watch?v=ab2VVp1GfMA>). January 31, 2016. Retrieved February 21, 2016 – via YouTube.
89. Davenport, Christian (June 13, 2016). "Elon Musk provides new details on his 'mind blowing' mission to Mars" (<https://www.washingtonpost.com/news/the-switch/wp/2016/06/10/elon-musk-provides-new-details-on-his-mind-blowing-mission-to-mars/>). *The Washington Post*. Retrieved June 14, 2016.
90. Chang, Kenneth (September 27, 2016). "Elon Musk's Plan: Get Humans to Mars, and Beyond" (<https://www.nytimes.com/2016/09/28/science/elon-musk-spacex-mars-exploration.html>). *The New York Times*. Retrieved September 27, 2016.
91. "Starship Update" (<https://www.youtube.com/watch?v=sOpMrVnjYeY&t=29s>). September 28, 2019.
92. Elon Musk (September 29, 2017). *Becoming a Multiplanet Species* (<https://www.youtube.com/watch?v=tdUX3ypDVwI>) (video). 68th annual meeting of the International Astronautical Congress in Adelaide, Australia: SpaceX. Retrieved December 31, 2017 – via YouTube.
93. Dent, Steve (September 29, 2017). "Elon Musk's Mars dream hinges on a giant new rocket" (<https://www.engadget.com/2017/09/29/space-x-mars-bfr-elon-musk/>). *Engadget*. Retrieved January 1, 2018.
94. "150 Meter Starhopper Test" ([https://www.youtube.com/watch?v=bYb3bfA6\\_sQ](https://www.youtube.com/watch?v=bYb3bfA6_sQ)). August 27, 2019.
95. "Elon Musk Says SpaceX Will Send Yusaku Maezawa (and Artists!) to the Moon" (<https://www.wired.com/story/spacex-will-send-yusaku-maezawa-and-artists-to-the-moon/>). *Wired*. September 18, 2018. Archived (<https://web.archive.org/web/20190716034529/https://www.wired.com/story/spacex-will-send-yusaku-maezawa-and-artists-to-the-moon/>) from the original on July 16, 2019. Retrieved May 27, 2019.
96. Eric Ralph (September 14, 2018). "SpaceX has signed a private passenger for the first BFR launch around the Moon" (<https://www.theslarati.com/spacex-private-passenger-bfr-moon-mission/>). Archived (<https://web.archive.org/web/20180914132048/https://www.theslarati.com/spacex-private-passenger-bfr-moon-mission/>) from the original on September 14, 2018. Retrieved September 14, 2018.
97. Foust, Jeff (November 17, 2018). "Musk hints at further changes in BFR design" (<https://spacenews.com/musk-hints-at-further-changes-in-bfr-design/>). *SpaceNews*. Retrieved March 22, 2019.
98. Boyle, Alan (November 19, 2018). "Goodbye, BFR ... hello, Starship: Elon Musk gives a classic name to his Mars spaceship" (<https://www.geekwire.com/2018/goodbye-bfr-hello-starship-elon-musk-gives-classic-name-mars-spaceship/>). *GeekWire*. Archived (<https://web.archive.org/web/20181122215524/https://www.geekwire.com/2018/goodbye-bfr-hello-starship-elon-musk-gives-classic-name-mars-spaceship/>) from the original on November 22, 2018. Retrieved November 22, 2018. "Starship is the spaceship/upper stage & Super Heavy is the rocket booster needed to escape Earth's deep gravity well (not needed for other planets or moons)"
99. Burns, Matt (October 8, 2014). "A Brief History of Tesla" (<https://techcrunch.com/gallery/a-brief-history-of-tesla/>). *TechCrunch*. TechCrunch.com. Retrieved June 11, 2015.
100. Nordqvist, Joseph (February 12, 2014). "Tesla Motors Inc.—Company Information" (<https://web.archive.org/web/20140212093533/http://www.marketbusinessnews.com/tesla-motors/12064>). Market Business News. Archived from the original (<http://www.marketbusinessnews.com/tesla-motors/12064>) on February 12, 2014. Retrieved April 16, 2014.
101. Musk, Elon (August 2, 2006). "The Secret Tesla Motors Master Plan (just between you and me) No. 124" (<http://www.teslamotors.com/blog/secret-tesla-motors-master-plan-just-between-you-and-me>). Tesla Motors. Archived (<https://web.archive.org/web/20100802142703/http://www.teslamotors.com/blog/secret-tesla-motors-master-plan-just-between-you-and-me>) from the original on August 2, 2010. Retrieved October 3, 2010.
102. "How Much Equity Did Elon Musk Get From Investing In Tesla's Series A?" (<https://www.forbes.com/sites/quora/2014/12/29/how-much-equity-did-elon-musk-get-from-investing-in-teslas-series-a/#11415dd62a9f>). *Forbes*. December 29, 2014. Retrieved December 23, 2019.
103. Burns, Matt (October 8, 2014). "A Brief History of Tesla" (<https://web.archive.org/web/20150717064829/https://techcrunch.com/gallery/a-brief-history-of-tesla/#/slide2>). *TechCrunch*. Archived from the original (<https://techcrunch.com/gallery/a-brief-history-of-tesla/>) on December 23, 2019. Retrieved June 11, 2015. "Tesla was founded not by Elon Musk, but rather by Martin Eberhard and Marc Tarpenning in July 2003. The two bootstrapped the fledgling auto company until Elon Musk led the company's US\$7.5 million Series A financing round in February 2004."
104. Rapiere, Graham (December 28, 2018). "Tesla has named two new board members—here's the full list of company directors" (<https://www.businessinsider.com/tesla-board-of-directors-full-list-elon-musk-chairman-replacement-2018-8>). *Business Insider*. Retrieved December 23, 2019.
105. "Elon Musk recounts Tesla's history at 2016 shareholders meeting" (<https://www.youtube.com/watch?v=AKfiKvbqQw?t=820>). May 31, 2016. Retrieved November 25, 2019.
106. Musk, Elon. "CEO Elon Musk" (<http://www.teslamotors.com/about/executives/elonmusk>). Tesla Motors. Retrieved October 20, 2010.
107. Morrison, Chris (October 15, 2008). "Musk steps in as CEO" (<https://www.nytimes.com/external/venturebeat/2008/10/15/15venturebeat-elon-musk-steps-in-as-ceo-at-tesla-lays-off-99182.html>). *The New York Times*.
108. "Industry Shift: With Four Departures This Year, Who Is The Longest-Tenured Automotive CEO?" (<https://finance.yahoo.com/news/industry-shift-four-departures-longest-190424759.html>). July 8, 2019.
109. Musk, Elon (August 2, 2006). "The Secret Tesla Motors Master Plan (just between you and me)" (<http://www.teslamotors.com/blog/2/?p=8>). Tesla Motors.
110. Ruddick, Graham. "Tesla's Model X electric car spreads falcon wings at US launch" (<https://www.theguardian.com/business/2015/sep/30/tesla-model-x-electric-car-launch-falcon-wings-suv>). *the Guardian*. Retrieved November 4, 2015.
111. "Tesla Model X: Not a model launch" (<http://fortune.com/2015/03/19/tesla-model-x>). *Fortune*. Retrieved November 4, 2015.
112. "Model X" (<http://www.teslamotors.com/modelx>). Tesla Motors. October 29, 2012.
113. Muller, Joann (June 1, 2013). "What Do Toyota And Mercedes See in Tesla? A Bit of Themselves" (<https://www.forbes.com/sites/joannmuller/2013/06/01/what-do-toyota-and-mercedes-see-in-tesla-a-bit-of-themselves>). *Forbes.com*.
114. "\$35,000 Tesla Model 3 Available Now" (<https://www.tesla.com/blog/35000-tesla-model-3-available-now>). February 28, 2019. Retrieved November 25, 2019.
115. "An Update to Our Vehicle Lineup" (<https://www.tesla.com/blog/update-our-vehicle-lineup>). April 11, 2019. Retrieved November 25, 2019.
116. Hamilton, Tyler (October 12, 2009). "Tesla CEO following in Henry Ford's tracks" (<https://web.archive.org/web/20091017115314/http://www.thestar.com/iphone/article/Business/708847>). *Toronto Star*. Archived from the original (<https://www.thestar.com/iphone/article/Business/708847>) on October 17, 2009.



17. Del Ray, Jason (May 29, 2013). *Musk: You'll Be Able to Drive Your Tesla Cross-Country by Year's End With Supercharger Expansion* (<http://allthingsd.com/20130529/musk-youll-be-able-to-drive-your-tesla-cross-country-by-years-end-with-supercharger-expansion/>). All Things D
18. "All Our Patent Are Belong To You" (<http://www.teslamotors.com/blog/all-our-patent-are-belong-you>). Tesla Motors. Retrieved November 4, 2015.
19. Hull, Dana (February 19, 2016). "Musk Gets Tesla.com Domain Name After Waiting a Decade" (<https://www.bloomberg.com/news/articles/2016-02-19/tesla-s-musk-gets-tesla-com-domain-name-after-waiting-a-decade>). Bloomberg L.P. Retrieved March 22, 2016.
20. "Tesla Gigafactory" (<https://www.tesla.com/gigafactory>). Retrieved December 23, 2019.
21. "Does Musk's Gigafactory Make Sense?" (<https://www.technologyreview.com/s/526126/does-musks-gigafactory-make-sense/>). April 14, 2019. Retrieved December 7, 2019.
22. "Inside Tesla's Gigafactory: A Crazy Idea Takes Shape In Nevada" (<https://www.forbes.com/sites/joannmuller/2016/07/27/inside-tesla-s-gigafactory-a-crazy-idea-takes-shape-in-nevada/#72b566f94d9b>). July 27, 2016. Retrieved December 7, 2019.
23. "Master Plan, Part Deux" (<https://web.archive.org/web/20170702050117/https://www.tesla.com/blog/master-plan-part-deux>). July 20, 2016. Archived from the original (<https://www.tesla.com/blog/master-plan-part-deux>) on July 2, 2017. Retrieved November 25, 2019.
24. "Elon Musk has 100 days to build the world's biggest battery" (<https://twitter.com/i/moments/913723414862479361>). September 29, 2017. Retrieved November 22, 2019.
25. "Elon Musk: I can fix South Australia power network in 100 days or it's free" (<https://www.theguardian.com/technology/2017/mar/10/elon-musk-i-can-fix-south-australia-power-network-in-100-days-or-its-free>). March 10, 2017. Retrieved November 22, 2019.
26. "South Australia's Tesla battery on track to make back a third of cost in a year" (<https://www.theguardian.com/technology/2018/sep/27/south-australias-tesla-battery-on-track-to-make-back-a-third-of-cost-in-a-year>). September 27, 2018. Retrieved November 22, 2019.
27. "Tesla battery proves a leading source of dispatchable power, AEMO says" (<https://www.abc.net.au/news/2018-10-02/tesla-battery-proves-a-leading-source-of-dispatchable-power/10326420>). October 1, 2018. Retrieved November 22, 2019.
28. "South Australia's giant Tesla battery output and storage set to increase by 50 per cent" (<https://www.abc.net.au/news/2019-11-19/s-a-big-battery-set-to-get-even-bigger/11716784>). November 19, 2019. Retrieved November 22, 2019.
29. Reuters (September 28, 2018). "Factbox - 'Funding secured': SEC gives timeline surrounding tweet from Tesla's Musk" (<https://www.reuters.com/article/us-tesla-musk-factbox/factbox-funding-secured-sec-gives-timeline-surrounding-tweet-from-teslas-musk-idUSKCN1M8139>). Retrieved November 23, 2018.
30. Goldstein, Matthew (September 27, 2018). "S.E.C. Sues Tesla's Elon Musk for Fraud and Seeks to Bar Him From Running a Public Company" (<https://www.nytimes.com/2018/09/27/business/elon-musk-sec-lawsuit-tesla.html>). *The New York Times*. Retrieved September 27, 2018.
31. O'Kane, Sean; Lopatto, Elizabeth (September 27, 2018). "Elon Musk sued by SEC for securities fraud" (<https://www.theverge.com/platform/amp/2018/9/27/17911428/sec-lawsuit-elon-musk-tesla-funding-tweet>). *www.theverge.com*. Retrieved September 27, 2018.
32. "'SEC Sues Elon Musk for Tweets About Taking Tesla Private, Seeks to Remove Him as CEO'" (<https://slate.com/news-and-politics/2018/09/elon-musk-tesla-sec-lawsuit.html>). September 27, 2018. Retrieved November 23, 2019.
33. "Elon Musk forced to step down as chairman of Tesla, remains CEO" (<https://www.theverge.com/2018/9/29/17918252/elon-musk-tesla-sec-securities-fraud-lawsuit-settlement-fine-penalty>). *The Verge*. Retrieved September 29, 2018.
34. "Tesla's Elon Musk says tweet that led to \$20 million fine 'Worth It'" (<https://www.reuters.com/article/us-tesla-musk-tweet-idUSKCN1N10K2>). *Reuters*. October 27, 2018. Retrieved December 9, 2018.
35. "Elon Musk commits to SEC settlement despite mocking tweets" (<https://abcnews.go.com/Business/elon-musk-commits-sec-settlement-mocking-tweets/story?id=58437587>). *ABC News*. October 11, 2018. Retrieved October 17, 2018.
36. Wolverton, Troy. "SEC says Elon Musk violated his settlement with the agency and asks a judge to hold him in contempt of court" (<https://www.businessinsider.com/elon-musk-sec-settlement-twitter-contempt-2019-2>). *Business Insider*. Retrieved February 26, 2019.
37. Ohnsman, Alan. "Elon Musk's Tesla Tweet Puts CEO Role At Risk Again" (<https://www.forbes.com/sites/alanohnsman/2019/02/25/elon-musks-tesla-tweet-puts-ceo-role-at-risk-again/>). *Forbes*. Retrieved February 26, 2019.
38. Wattles, Jackie (April 27, 2019). "Elon Musk and SEC reach an agreement over tweeting" (<https://edition.cnn.com/2019/04/26/tech/elon-musk-sec-settlement/index.html>). *CNN Business*. Retrieved July 16, 2019.
39. Marino-Nachison, David (April 26, 2019). "Tesla CEO Elon Musk Gets a Long Do-Not-Tweet List From the SEC" ([https://www.barrons.com/articles/tesla-ceo-elon-musk-sec-settlement-list-51556317578?mod=article\\_inline](https://www.barrons.com/articles/tesla-ceo-elon-musk-sec-settlement-list-51556317578?mod=article_inline)). *www.barrons.com*. Dow Jones & Company, Inc. Retrieved November 25, 2019.
40. "Tesla's Musk says Shanghai factory breaking ground" (<https://abcnews.go.com/Business/wireStory/teslas-musk-shanghai-factory-breaking-ground-60204858>). *ABC news*. January 7, 2019.
41. "Tesla boss Elon Musk says he loves China, so Premier Li Keqiang offers him a green card" (<https://www.politico.com/story/2019/01/10/elon-musk-china-green-card-1074123>). *Politico*. January 10, 2019.
42. Hoare, Callum (October 15, 2019). "Elon Musk: Why Tesla CEO admitted 'pretty big AI mistake caused tragedy of errors'" (<https://www.express.co.uk/news/science/1190979/elon-musk-tesla-artificial-intelligence-mistake-tragedy-spacex-open-ai-spt>). *Express.co.uk*. Retrieved October 16, 2019.
43. Kolodny, Lora (October 23, 2019). "Tesla shares soar after crushing third-quarter earnings" (<https://www.cnn.com/2019/10/23/tesla-tesla-earnings-q3-2019.html>). *CNN*. Retrieved October 23, 2019.
44. Musk, Elon [@elonmusk] (September 7, 2019). "No change" (<https://twitter.com/elonmusk/status/1181990398379483137>) (Tweet) – via Twitter.
45. Musk, Elon [@elonmusk] (November 6, 2019). "The date is strangely familiar ..." (<https://twitter.com/elonmusk/status/1192117194756243457>) (Tweet). Los Angeles. Retrieved November 6, 2019 – via Twitter.
46. "Tesla Cybertruck: Elon Musk's Pickup Truck Has Arrived" (<https://www.wired.com/story/electric-tesla-pickup-truck-announcement-specs-cost-photos/>) – via [www.wired.com](http://www.wired.com).
47. Claudia Assis; Jeremy C. Owens. "Elon Musk exercises Tesla options, pays million tax bill with own cash" (<http://www.marketwatch.com/story/elon-musk-buys-tesla-shares-cheap-pays-hefty-tax-bill-with-own-cash-2016-01-29>). *MarketWatch*. Retrieved February 21, 2016.
48. Ziegler, Chris (January 29, 2016). "Elon Musk bought \$100 million more worth of Tesla this week" (<https://www.theverge.com/2016/1/29/10873576/elon-musk-100-million-option-exercise-stock-tesla>). *The Verge*. Vox Media. Retrieved February 21, 2016.
49. "Tesla's Elon Musk worked for free last year" (<http://fortune.com/2015/04/23/elon-musk-tesla-salary>). *Fortune*. Retrieved November 4, 2015.

50. Durisin, Megan (August 10, 2013). "Musk get US\$4.3 million of stock options for Model X work" (<https://www.bloomberg.com/news/2013-08-09/musk-gets-4-3-million-of-stock-options-for-model-x-work.html>). *Bloomberg L.P.* Retrieved January 15, 2014.
51. "Elon Musk wins approval for 'staggering' pay deal with potential \$55bn bonus" (<https://www.theguardian.com/technology/2018/mar/21/elon-musk-tesla-bonus-pay>). March 21, 2018. Retrieved September 24, 2019.
52. "Musk's New Pay Deal Could Make Him the World's Richest Man—If Tesla Succeeds" (<https://www.bloomberg.com/news/articles/2018-01-23/tesla-tops-ups-all-in-bet-on-musk-with-2-6-billion-option-award>). *Bloomberg.com*. January 23, 2018. Retrieved March 6, 2018.
53. Waters, Richard (March 8, 2018). "Elon Musk's \$2.6bn stock options package at Tesla opposed by ISS" (<https://www.ft.com/content/434579a8-2311-11e8-ae48-60d3531b7d11>). *Financial Times*. Retrieved December 11, 2019.
54. "Management Team" (<http://www.solarcity.com/media-center/management-team.aspx>). SolarCity.
55. Kanellos, Michael (February 15, 2008). "Newsmaker: Elon Musk on rockets, sports cars, and solar power" ([http://news.cnet.com/Elo-n-Musk-on-rockets,-sports-cars,-and-solar-power---page-2/2008-11389\\_3-6230661-2.html](http://news.cnet.com/Elo-n-Musk-on-rockets,-sports-cars,-and-solar-power---page-2/2008-11389_3-6230661-2.html)). *CNET*.
56. "2013 Top 250 Solar Contractors" (<http://www.solarpowerworldonline.com/top-250-solar-contractors>). *Solar Power World*. September 13, 2013.
57. "Tesla's Acquisition of SolarCity Receives Shareholder Approval" ([https://www.tesla.com/en\\_GB/blog/teslas-acquisition-of-solarcity-receives-shareholder-approval](https://www.tesla.com/en_GB/blog/teslas-acquisition-of-solarcity-receives-shareholder-approval)). Retrieved November 17, 2016.
58. "Early Christmas Present For Elon Musk As Shareholders Bless Tesla-SolarCity Merger" (<https://www.forbes.com/sites/alanohnsman/2016/11/17/early-christmas-present-for-elon-musk-as-shareholders-bless-tesla-solarcity-merger/>). *Forbes*. November 17, 2016. Retrieved November 22, 2016.
59. "Tesla - Current Report" (<https://web.archive.org/web/20180620024603/http://ir.tesla.com/secfiling.cfm?filingid=1193125-16-773705&CIK=1318605>). *ir.tesla.com*. Archived from the original (<http://ir.tesla.com/secfiling.cfm?filingid=1193125-16-773705&CIK=1318605>) on June 20, 2018. Retrieved December 25, 2017.
60. Elon Musk (August 2, 2006). "The Secret Tesla Motors Master Plan" (<https://www.tesla.com/blog/secret-tesla-motors-master-plan-just-between-you-and-me>). Retrieved September 24, 2019.
61. *The unveiling of the Tesla Motors Electric Car* ([https://www.youtube.com/watch?v=hOI\\_1S10jTk](https://www.youtube.com/watch?v=hOI_1S10jTk)). Autoblog. Retrieved July 26, 2006.
62. Diggelen, Alison van. "Tesla and SolarCity Collaborate on Clean Energy Storage" (<http://blogs.kqed.org/climatewatch/2012/04/24/tesla-and-solarcity-collaborate-on-clean-energy-storage>). KQED. Retrieved June 25, 2012.
63. Smith, Aaron (June 17, 2014). "Elon Musk's sunny plans for Buffalo" (<http://money.cnn.com/2014/06/17/news/companies/solarcity-sil-evo>). *CNNMoney*.
64. Ayre, James (September 7, 2017). "Solar Roof Tile Production At Tesla's Buffalo 'Gigafactory' Now Up & Running" (<https://cleantechhnica.com/2017/09/07/solar-roof-tile-production-teslas-buffalo-facility-now-running>). *CleanTechnica*. US. Retrieved September 26, 2018.
65. "New York taxpayers' gift to Elon Musk" (<https://nypost.com/2018/03/24/new-york-taxpayers-gift-to-elon-musk>). *New York Post*. March 25, 2018. Retrieved April 10, 2018.
66. "Beyond the hype of Hyperloop: An analysis of Elon Musk's proposed transit system" (<http://www.gizmag.com/hyperloop-musk-analysis/28672/>). *Gizmag.com*. August 22, 2013. Retrieved August 23, 2013.
67. Ashlee Vance. "Revealed: Elon Musk Explains the Hyperloop, the Solar-Powered High-Speed Future of Inter-City Transportation" (<http://www.businessweek.com/articles/2013-08-12/revealed-elon-musk-explains-the-hyperloop>). *Bloomberg BusinessWeek*. Retrieved April 27, 2016.
68. "Hyperloop Update: Elon Musk Will Start Developing It Himself" (<https://www.forbes.com/sites/hannahelliott/2013/08/12/latest-update-elon-musk-will-start-the-hyperloop-himself/#5143db7047a8>). *Forbes.com*. Retrieved March 22, 2016.
69. "Musk announces plans to build Hyperloop demonstrator" (<http://www.gizmag.com/musk-developing-hyperloop-demonstrator/28684/>). *gizmag.com*. Retrieved November 4, 2015.
70. Musk, Elon (August 12, 2013). "Hyperloop Alpha" ([http://www.spacex.com/sites/spacex/files/hyperloop\\_alpha-20130812.pdf](http://www.spacex.com/sites/spacex/files/hyperloop_alpha-20130812.pdf)) (PDF). *SpaceX*. Retrieved August 13, 2013.
71. Musk, Elon (August 12, 2013). "Hyperloop" (<http://www.teslamotors.com/blog/hyperloop>). *Tesla*. Retrieved August 13, 2013.
72. "Hyperloop Designed for Quick, Convenient Commute" (<http://abcnews.go.com/Technology/hyperloop-designed-quick-convenient-commute/story?id=19936169>). ABC News. March 9, 2013. Retrieved August 15, 2013.
73. "Hyperloop" (<http://www.spacex.com/hyperloop>). *SpaceX*. Retrieved August 13, 2013.
74. Mazza, Sandy (January 29, 2017). "Hyperloop competition brings new mass-transit technology to life in Hawthorne" (<http://www.dailybulletin.com/science/20170129/hyperloop-competition-brings-new-mass-transit-technology-to-life-in-hawthorne>). *Daily Bulletin*.
75. Hawkins, Andrew J. (July 14, 2017). "Talking to Hyperloop One about its big 'Kitty Hawk' moment – and what comes next" (<https://www.theverge.com/2017/7/14/15960686/hyperloop-one-test-success-interview-giegel-pishevar>). *The Verge*. Retrieved July 14, 2017.
76. "Elon Musk Says He Has 'Verbal' OK To Build N.Y.-D.C. Hyperloop" (<https://www.npr.org/sections/thetwo-way/2017/07/20/538328487/elon-musk-says-he-has-verbal-ok-to-build-n-y-d-c-hyperloop>). *NPR.org*. Retrieved July 25, 2017.
77. Markoff, John (December 11, 2015). "Artificial-Intelligence Research Center Is Founded by Silicon Valley Investors" (<https://www.nytimes.com/2015/12/12/science/artificial-intelligence-research-center-is-founded-by-silicon-valley-investors.html>). *The New York Times*. Retrieved December 15, 2015.
78. Levy, Steven (December 11, 2015). "How Elon Musk and Y Combinator Plan to Stop Computers From Taking Over" (<https://medium.com/backchannel/how-elon-musk-and-y-combinator-plan-to-stop-computers-from-taking-over-17e0e27dd02a>). *Backchannel on Medium*. Retrieved December 15, 2015.
79. "Elon Musk, who has sounded the alarm on AI, leaves the organization he co-founded to make it safer" (<https://www.cnn.com/2018/02/21/elon-musk-is-leaving-the-board-of-openai.html>). *CNN*. February 21, 2018. Retrieved February 28, 2018.
80. Mark Harris, "How Elon Musk's secretive foundation hands out his billions" (<https://www.theguardian.com/technology/2019/jan/23/how-elon-musks-secretive-foundation-benefits-his-own-family#img-1>), *The Guardian*, 23 January 2019. Retrieved on 2019-02-01
81. "Elon Musk launches Neuralink, a venture to merge the human brain with AI" (<https://www.theverge.com/2017/3/27/15077864/elon-musk-neuralink-brain-computer-interface-ai-cyborgs>). *The Verge*. March 27, 2017. Retrieved April 10, 2017.
82. Golson, Jordan (January 25, 2017). "Elon Musk: 'Without tunnels, we will all be in traffic hell forever'" (<https://www.theverge.com/2017/1/25/14391410/elon-musk-tunnels-traffic-tesla-spacex-boring-company>). *The Verge*. Retrieved January 29, 2017.
83. "Elon Musk Will Begin Digging His 'Boring Company' Tunnel in About A Month" (<http://fortune.com/2017/01/25/elon-musk-tesla-boring-company-traffic-solution/>). *Fortune*. Retrieved January 29, 2017.
84. Parnell, Brid-Aine. "Elon Musk Teases Traffic-Busting Tunneling Firm 'The Boring Co.'" (<https://www.forbes.com/sites/bridaineparnell>

- /2017/01/26/elon-musk-teases-traffic-busting-tunneling-firm-the-boring-co/2/#ecc593564aa1). *Forbes*. Retrieved January 29, 2017.
85. Solon, Olivia (January 26, 2017). "Elon Musk to dig tunnel to ease traffic in LA, but he doesn't yet have permission" (<https://www.theguardian.com/technology/2017/jan/25/elon-musk-la-traffic-tunnel>) – via The Guardian.
  86. Chafkin, Max (February 16, 2017). "Elon Musk Is Really Boring" (<https://www.bloomberg.com/news/features/2017-02-16/elon-musk-is-really-boring>). Bloomberg. Retrieved February 17, 2017.
  87. Heathman, Amelia. "Elon Musk's boring machine has already built a 'test trench' in LA" (<https://www.wired.co.uk/article/elon-musk-tunnel-boring>). *Wired UK*. Retrieved February 19, 2017.
  88. Hanley, Steve. "Elon Musk Talks About His Vision Of The Future At TED2017" (<http://gas2.org/2017/05/03/elon-musk-talks-vision-future-ted2017/>). *Gas2*. Retrieved October 16, 2017.
  89. "Steve Jurvetson talks The Boring Company: Short-range EV tunnels before Hyperloop" (<http://www.teslarati.com/steve-jurvetson-talks-boring-company-short-range-ev-tunnels-hyperloop/>). *teslarati.com*. Archived (<https://web.archive.org/web/20171014233930/http://www.teslarati.com/steve-jurvetson-talks-boring-company-short-range-ev-tunnels-hyperloop/>) from the original on October 14, 2017. Retrieved October 14, 2017.
  90. "When Boring Company Will Start Digging Northeast Hyperloop, Gov Docs Reveal : It's sooner than you think" (<https://www.inverse.com/article/39460-elon-musk-hyperloop-boring-company>). *Inverse*. December 15, 2017. Retrieved December 22, 2018.
  91. Elon Musk's Boring Company proposes tunnel system leading to LA Dodgers Stadium (<https://www.teslarati.com/elon-musk-boring-company-la-tunnel-dodgers-stadium>), *Teslarati*, 16 August 2018, accessed 22 December 2018.
  92. Elon Musk (December 18, 2018). *The Boring Company Event Webcast* (<https://www.youtube.com/watch?v=nSIzsMlwMUY>) (video). Hawthorne, California: The Boring Company. Retrieved December 22, 2018 – via YouTube.
  93. Nelson, Laura J. "Elon Musk's Boring Co. is unveiling its tunnel, and sleepy Hawthorne is ready" (<https://www.latimes.com/local/lanow/la-me-ln-elon-musk-tunnel-hawthorne-20181217-story.html>). *latimes.com*.
  94. "Elon Musk joins the Truth Squad and so can you" (<http://www.politifact.com/truth-o-meter/article/2018/may/24/elon-musk-new-member-politifacts-truth-squad-heres/>). *PolitiFact*. Retrieved July 18, 2018.
  95. "Tesla says its factory is safer. But it left injuries off the books" (<https://www.revealnews.org/article/tesla-says-its-factory-is-safer-but-it-left-injuries-off-the-books/>). *Reveal*. April 16, 2018. Retrieved July 18, 2018.
  96. Musk, Elon [@elonmusk] (May 23, 2018). "Tweet on credibility website idea" (<https://twitter.com/elonmusk/status/999367582271422464>) (Tweet) – via Twitter.
  97. "Elon Musk thinks you can crowdsource truth, but that's not how the internet works" (<https://www.theverge.com/2018/5/24/17390208/elon-musk-pravda-journalism-truth>). *The Verge*. Retrieved July 18, 2018.
  98. <https://www.facebook.com/peter.holley.923>. "Pravda: Elon Musk's solution for punishing journalists" (<https://www.washingtonpost.com/news/innovations/wp/2018/05/24/pravda-elon-musks-solution-for-punishing-journalists/>). *Washington Post*. Retrieved July 18, 2018.
  99. Elon Musk [@elonmusk] (May 25, 2018). "Tweet on buying Pravduh.com" (<https://twitter.com/elonmusk/status/1000080833678528512>) (Tweet) – via Twitter.
  100. Smith, Nicola (July 6, 2018). "Elon Musk joins effort to free Thai boys from cave, as immediate diving attempt ruled out" (<https://www.telegraph.co.uk/news/2018/07/06/elon-musk-joins-effort-free-thai-boys-cave-immediate-diving/>). *The Telegraph*. London.
  101. Jordan, Dearbail (July 6, 2018). "Elon Musk offers to help Thai cave rescue" (<https://www.bbc.com/news/business-44735412>). *BBC News*. Retrieved October 25, 2018.
  102. Glaser, April. "Elon Musk Is Trying to Aid the Thai Cave Rescue by Sending His Engineers and Brainstorming on Twitter" (<https://slate.com/technology/2018/07/elon-musk-is-trying-to-aid-the-thai-cave-rescue-by-sending-engineers-and-brainstorming-on-twitter.html>). *Slate*. Archived (<https://web.archive.org/web/20180707234959/https://slate.com/technology/2018/07/elon-musk-is-trying-to-aid-the-thai-cave-rescue-by-sending-engineers-and-brainstorming-on-twitter.html>) from the original on July 7, 2018. Retrieved July 8, 2018.
  103. "Elon Musk says SpaceX is building a 'kid-sized submarine' to rescue trapped soccer team" (<https://www.theverge.com/2018/7/7/1754452/elon-musk-spacex-thailand-cave-soccer-team-kid-sized-submarine-rescue>). *The Verge*. Archived (<https://web.archive.org/web/20180708015003/https://www.theverge.com/2018/7/7/1754452/elon-musk-spacex-thailand-cave-soccer-team-kid-sized-submarine-rescue>) from the original on July 8, 2018. Retrieved July 8, 2018.
  104. "Richard Stanton email correspondence" (<https://twitter.com/elonmusk/status/1016684366083190785>). *Twitter*. Archived (<https://web.archive.org/web/20180718112856/https://twitter.com/elonmusk/status/1016684366083190785>) from the original on July 18, 2018. Retrieved July 19, 2018.
  105. Ferris, Robert (July 10, 2018). "Elon Musk says his 'mini-submarine' can be used for other things" (<https://www.cnbc.com/2018/07/10/elon-musk-says-his-mini-submarine-can-be-used-for-other-things.html>). *CNBC*. Retrieved July 13, 2018.
  106. "Tested for Thailand, SpaceX's makeshift mini-sub could serve as space escape pod" (<https://www.geekwire.com/2018/tested-thailand-spacexs-makeshift-mini-sub-serve-space-escape-pod/>). *GeekWire.com*. July 8, 2018. Retrieved December 7, 2019.
  107. "Let's Talk About Elon Musk's Submarine" (<https://hackaday.com/2018/07/17/lets-talk-about-elon-musks-submarine/>). *Hackaday*. July 17, 2018. Retrieved August 11, 2018.
  108. "Tested for Thailand, SpaceX's makeshift mini-sub could serve as space escape pod" (<https://www.geekwire.com/2018/tested-thailand-spacexs-makeshift-mini-sub-serve-space-escape-pod/>). *GeekWire.com*. July 8, 2018. Retrieved December 7, 2019.
  109. McKay, Tom. "Elon Musk Says He's Building a Tiny 'Submarine' to Rescue Thai Soccer Team Trapped in Cave" (<https://gizmodo.com/elon-musk-says-hes-building-a-tiny-submarine-to-rescue-1827422516>). *Gizmodo*. Retrieved August 28, 2018.
  110. "Arcata's Wing Inflatables, SpaceX collaborate on Thailand cave rescue" (<https://madriverrunion.com/arcatas-wing-inflatables-spacex-collaborate-on-thailand-cave-rescue/>). *Mad River Union*. Archived (<https://web.archive.org/web/20180709215725/https://www.teslarati.com/elon-musk-thailand-cave-rescue-wing-inflatables/>) from the original on July 9, 2018. Retrieved July 19, 2018.
  111. "Answering Elon Musk's call for help to build Thailand's cave rescue pod in 24 hours" (<https://www.teslarati.com/elon-musk-thailand-cave-rescue-wing-inflatables/>). *Teslarati*. Archived (<https://web.archive.org/web/20180709215725/https://www.teslarati.com/elon-musk-thailand-cave-rescue-wing-inflatables/>) from the original on July 9, 2018. Retrieved July 10, 2018.
  112. "Boys rescued from Thai cave were sedated with ketamine" (<https://www.cnn.com/2019/04/04/health/thailand-boys-cave-ketamine-in-t/index.html>). *CNN*. April 4, 2019. Retrieved December 10, 2019.
  113. "Thai Soccer Team's Cave Rescue Aided by Ketamine" (<https://www.webmd.com/children/news/20190403/thai-soccer-teams-cave-rescue-aided-by-ketamine>). April 3, 2019. Retrieved December 10, 2019.
  114. "Handcuffed, drugged with ketamine: Truth behind Thai cave rescue" (<https://www.news.com.au/world/asia/handcuffed-drugged-with-ketamine-truth-behind-thai-cave-rescue/news-story/172803c159e20de5cef5dee324266d30>). January 16, 2019. Retrieved December 18, 2019.

15. "Thai Navy May Put Elon Musk's Mini-Submarine to Use. One Day" (<https://www.nytimes.com/2018/07/12/world/asia/elon-musk-thai-cave-submarine-nyt.html?action=click&module=RelatedCoverage&pgtype=Article&region=Footer>). *New York Times*. July 12, 2018. Retrieved December 10, 2019.
16. "Elon Musk's cave rescue submarine may be used in future missions, says Thai military official" (<https://www.independent.co.uk/news/world/asia/elon-musk-thai-cave-rescue-submarine-thailand-tham-luang-cave-a8445301.html>). *The Independent*. London. July 13, 2018. Retrieved December 10, 2019.
17. "Thai official: Elon Musk's submarine 'not practical for this mission' [Updated]" (<https://arstechnica.com/science/2018/07/thai-official-elon-musks-submarine-not-practical-for-this-mission/>). *Ars Technica*. Retrieved August 28, 2018.
18. "Thai king confers awards on two Australian divers for rescue of cave boys" (<https://af.reuters.com/article/worldNews/idAFKCN1RV0QU?feedType=RSS&feedName=worldNews>). April 19, 2019. Retrieved September 23, 2019.
19. ราชกิจจานุเบกษา (March 21, 2019). "ประกาศสำนักนายกรัฐมนตรี เรื่อง พระราชทานเครื่องราชอิสริยาภรณ์อันเป็นที่สรรเสริญยิ่งดิเรกคุณาภรณ์ให้แก่บุคคลที่ช่วยเหลือผู้ประสบภัยในถ้ำหลวง วนอุทยานถ้ำหลวง-ขุนน้ำนางนอน จังหวัดเชียงราย" ([http://www.ratchakitcha.soc.go.th/DATA/PDF/2562/B/007/T\\_0001.PDF](http://www.ratchakitcha.soc.go.th/DATA/PDF/2562/B/007/T_0001.PDF)) (PDF) (in Thai). Retrieved September 23, 2019.
20. Rawlinson, Kevin (July 10, 2018). "Elon Musk queries expertise of Thai cave rescue officials" (<https://www.theguardian.com/news/2018/jul/10/elon-musk-queries-expertise-of-thai-cave-rescue-officials>). *The Guardian*. Retrieved July 16, 2018.
21. Suhartono, Muktita; Jacobs, Julia (July 15, 2018). "Elon Musk Defends His Rejected Mini-Sub Plan for Thai Cave" (<https://www.nytimes.com/2018/07/10/world/asia/elon-musk-thailand-cave-submarine.html>). *The New York Times*. Retrieved July 16, 2018.
22. Furious Elon Musk calls Thailand cave rescue diver a 'pedo' (<https://nypost.com/2018/07/15/furious-elon-musk-calls-thai-rescue-diver-a-pedo/>) By Linda Massarella, NYP July 15, 2018
23. Baynes, Chris (July 14, 2018). "Elon Musk can 'stick his submarine where it hurts', says British caver who helped rescue Thai schoolboys" (<https://www.independent.co.uk/news/world/asia/thai-cave-rescue-elon-musk-mini-submarine-british-driver-tham-luang-vern-unsworth-a8447166.html>). *Independent*. Retrieved July 14, 2018.
24. David Z. Morris (July 15, 2018). "Elon Musk Calls Diver in Thai Soccer Team Rescue a Pedophile" (<http://fortune.com/2018/07/15/elon-musk-thai-rescue-diver-pedo-guy/>). *Fortune*. Retrieved July 15, 2018.
25. Michaels, Matthew (July 15, 2018). "Elon Musk calls British diver from the Thai cave rescue a 'pedo guy' after he said Elon 'can stick his submarine where it hurts'" (<http://www.businessinsider.com/elon-musk-british-cave-diver-pedo-feud-thai-cave-rescue-2018-7>). *Business Insider*. Business Insider. Retrieved July 15, 2018.
26. Levin, Sam (July 15, 2018). "Elon Musk calls British diver in Thai cave rescue a 'pedo' in baseless attack" (<https://www.theguardian.com/technology/2018/jul/15/elon-musk-british-diver-thai-cave-rescue-pedo-twitter>). *The Guardian*. The Guardian. Retrieved July 15, 2018.
27. "British caver 'could sue' Elon Musk" (<https://www.bbc.co.uk/news/world-asia-44846945>). *BBC News*. July 16, 2018. Retrieved July 16, 2018.
28. Safi, Michael; Levin, Sam (July 16, 2018). "British cave diver considering legal action over Elon Musk's 'pedo' attack" (<https://www.theguardian.com/uk-news/2018/jul/16/british-diver-in-thai-cave-rescue-stunned-after-attack-by-elon-musk>). *The Guardian*. The Guardian. Retrieved July 16, 2018.
29. Browne, Ryan. "Elon Musk apologizes to British cave diver following baseless 'pedo guy' claim" (<https://www.cnbc.com/2018/07/18/elon-musk-apologizes-to-british-cave-diver-following-baseless-pedo-gu.html>). *CNBC*. Retrieved July 18, 2018.
30. Chang, Charis (July 18, 2018). "Elon Musk apologises for calling Thai rescue diver a 'pedo'" (<https://www.news.com.au/technology/innovation/elon-musk-apologises-for-calling-thai-rescue-diver-a-pedo/news-story/606b3fc050064b9b5d39b7db133a46f1>). *news.com.au*. Retrieved July 18, 2018.
31. "Twitter" (<https://twitter.com/elonmusk/status/1019472152796381185>). July 17, 2018. Retrieved July 18, 2018.
32. Van Boom, Daniel (July 18, 2018). "Elon Musk apologises for calling Thai cave rescue diver 'pedo guy'" (<https://www.cnet.com/news/elon-musk-apologises-for-pedo-guy-comment/>). *CNET*. Retrieved July 18, 2018.
33. Mac, Ryan. "Elon Musk Revisits Baseless Pedophile Claims" (<https://www.buzzfeednews.com/article/ryanmac/elon-musk-revisits-baseless-pedophile-claims>). *BuzzFeed News*. Retrieved August 28, 2018.
34. Mac, Ryan (August 29, 2018). "The Rescuer Elon Musk Called A "Pedo" Is Preparing A Libel Claim" (<https://www.buzzfeednews.com/article/ryanmac/the-british-diver-elon-musk-called-a-pedo-threatened-to-sue>). *BuzzFeed News*. Retrieved August 29, 2018.
35. Castillo, Michelle (August 29, 2018). "Cave explorer Elon Musk called a 'pedo guy' is preparing a lawsuit" (<https://www.cnbc.com/2018/08/29/cave-explorer-elon-musk-called-a-pedo-guy-is-preparing-a-lawsuit.html>). *CNBC*. Retrieved August 29, 2018.
36. Mac, Ryan (September 17, 2019). "Elon Musk Paid A Private Investigator \$50,000 To Dig Up Dirt On A British Cave Rescuer He Called A "Pedo Guy"" (<https://www.buzzfeednews.com/article/ryanmac/elon-musk-unsworth-pedo-guy-deposition-private-investigator>). *BuzzFeed News*. Retrieved October 12, 2019.
37. Mac, Ryan; Di Stefano, Mark (October 3, 2019). "Elon Musk Hired A Convicted Felon To Investigate The Cave Rescuer Who Is Now Suing Him" (<https://www.buzzfeednews.com/article/ryanmac/elon-musk-hired-felon-james-howard-higgins-dirt-pedo-guy>). *BuzzFeed News*. Retrieved October 12, 2019.
38. "Musk says calling diver 'pedo' was not an accusation of pedophilia" (<https://www.dw.com/en/musk-says-calling-diver-pedo-was-not-an-accusation-of-pedophilia/a-50465948>). *Deutsche Welle*. September 17, 2019. Retrieved September 20, 2019.
39. Lee, Timothy B. (September 17, 2019). "Musk spent \$50,000 digging into critic's personal life: "Bet ya a signed dollar it's true" was an expression of uncertainty, Musk says" (<https://arstechnica.com/tech-policy/2019/09/musk-paid-investigator-50000-to-substantiate-pedo-guy-claim/>). *Ars Technica*. Retrieved September 20, 2019.
40. Levin, Sam (September 5, 2018). "Elon Musk calls Thailand diver 'child rapist' in latest baseless attack" (<https://www.theguardian.com/technology/2018/sep/04/elon-musk-claims-diver-in-thai-cave-rescue-is-child-rapist-without-evidence>). *The Guardian*. Retrieved September 5, 2018.
41. "Elon Musk sued for libel by British Thai cave rescuer" (<https://www.bbc.com/news/world-us-canada-45551895>). *BBC*. September 17, 2018. Retrieved September 17, 2018.
42. Locklear, Mallory (September 17, 2018). "British cave diver sues Elon Musk over 'pedo guy' comments" (<https://www.engadget.com/2018/09/17/elon-musk-sued-pedo-guy-comments/>). *Engadget*. Retrieved September 17, 2018.
43. Tony Thorne (January 1, 2009). *Dictionary of Contemporary Slang* ([https://books.google.com/books?id=3\\_6oRAJSHP4C&pg=PA323](https://books.google.com/books?id=3_6oRAJSHP4C&pg=PA323)). Bloomsbury Publishing. pp. 323–. ISBN 978-1-4081-0220-6.
44. Aaron Mak, Slate Magazine (December 4, 2019). "Elon Musk Says "Pedo Guy" Was a Common Insult in His Youth. We Checked With His Schoolmates" (<https://slate.com/technology/2019/12/elon-musk-trial-pedo-guy-diver-lawsuit.html>). Retrieved December 7, 2019.
45. Wong, Julia Carrie (December 4, 2019). "Elon Musk: pedo guy insult was 'not classy' but not meant literally" (<https://www.theguardian.com>



- ...Hong, and Carrie (December 11, 2019). "Elon Musk pedo guy insult was not classy, but not meant literally" (<https://www.theguardian.com/technology/2019/dec/04/elon-musk-pedo-guy-insult-was-not-classy-but-not-meant-literally>) – via [www.theguardian.com](http://www.theguardian.com).
46. Kolodny, Iora (May 10, 2019). "Elon Musk found not liable in 'pedo guy' defamation trial" (<https://www.cnn.com/2019/12/06/unswoth-h-vs-musk-pedo-guy-defamation-trial-verdict.html>). *CNN*. Retrieved December 6, 2019.
47. "Letter to the Editor: Lawyer for Man Who Sued Musk Claims 'Justice Worked' Despite Defense Verdict" (<https://www.law.com/thecorridor/2019/12/09/letter-to-the-editor-lawyer-for-man-who-sued-musk-claims-justice-worked-despite-defense-verdict/?sreturn=20191118194929>). December 9, 2019. Retrieved December 18, 2019.
48. "Elon Musk on Twitter" (<https://twitter.com/elonmusk/status/980566116614291456>). *Twitter*. Retrieved November 29, 2018.
49. Whitten, Sarah (October 12, 2018). "Elon Musk's Tesla files for a trademark of 'Teslaquila'" ([https://www.cnn.com/2018/10/12/elon-musks-tesla-seeks-to-trademark-teslaquila.html?\\_\\_source=twitter%7Cinternational](https://www.cnn.com/2018/10/12/elon-musks-tesla-seeks-to-trademark-teslaquila.html?__source=twitter%7Cinternational)). *CNN*. Retrieved November 29, 2018.
50. "Elon Musk on Twitter" (<https://twitter.com/elonmusk/status/1050792830732394496>). *Twitter*. Retrieved November 29, 2018.
51. Reuters. "Elon Musk's 'Teslaquila' Faces Clash With Mexican Tequila Industry" (<https://www.voanews.com/a/elon-musk-s-teslaquila-drink-faces-clash-with-mexican-tequila-industry/4657757.html>). *VOA*. Retrieved November 29, 2018.
52. "Emo G Records" (<https://soundcloud.com/user-209448905>). *SoundCloud*. Retrieved April 2, 2019.
53. Arcand, Rob (March 31, 2019). "Elon Musk Drops Surprise Rap Single 'RIP Harambe'" (<https://www.spin.com/2019/03/elon-musk-drops-rap-single-rip-harambe/>). *Spin*. Retrieved April 1, 2019.
54. Fitzgerald, Trent (March 31, 2019). "Elon Musk Randomly Shares Rap Song Dedicated to Harambe" (<https://www.xxlmag.com/news/2019/03/elon-musk-rap-song-harambe/>). *XXL*. Retrieved April 10, 2019.
55. "Elon Musk: The Way Of The Future" (<https://www.youtube.com/watch?v=B1OPxitgvmw>). YouTube. Retrieved November 4, 2015.
56. Musk, Elon (July 14, 2018). "To be clear, I am not a conservative. I'm registered independent & politically moderate" (<https://twitter.com/elonmusk/status/1018265614295523328>). *@elonmusk*. Twitter. Retrieved January 22, 2019.
57. Strange, Adario (November 5, 2016). "Elon Musk thinks universal income is answer to automation taking human jobs" (<http://mashable.com/2016/11/05/elon-musk-universal-basic-income/>). *mashable.com*. Retrieved February 6, 2017.
58. "Elon Musk on Twitter" (<https://twitter.com/elonmusk/status/1008124944289370113>). *Twitter*. Retrieved June 29, 2018.
59. "Elon Musk on Twitter" (<https://twitter.com/elonmusk/status/1008013111058526209>). *Twitter*. Retrieved June 29, 2018.
60. "Elon Musk on Twitter" (<https://twitter.com/elonmusk/status/1009362316536602625>). *Twitter*. Retrieved June 29, 2018.
61. Wattenberg, Ben. "Elon Musk and the frontier of Technology" (<https://www.pbs.org/thinktank/transcript1292.html>). *Think Tank*. PBS.org. Retrieved June 12, 2015.
62. "Elon Musk on Trump presidency: 'I don't think he's the right guy'" (<http://www.businessinsider.in/Elon-Musk-on-Trump-presidency-I-dont-think-hes-the-right-guy/articleshow/55251034.cms>). *businessinsider.in*. Retrieved March 21, 2017.
63. Lee, Dave (January 26, 2017). "Elon Musk: I'm Trump's voice of reason" (<https://www.bbc.com/news/technology-38753819>). *BBC News*. Retrieved January 29, 2017.
64. "US quits Paris climate pact: Reaction from around the world following the US president's decision on the Paris accord" (<https://www.bbc.co.uk/news/live/world-us-canada-40123293>). Retrieved June 1, 2017.
65. "Elon Musk announcing departing presidential councils on Twitter" (<https://twitter.com/elonmusk/status/870369915894546432>). Retrieved June 1, 2017.
66. Maria Jose Valero (August 10, 2019). "Elon Musk Says He Supports 2020 White House Hopeful Andrew Yang" (<https://www.bloomberg.com/news/articles/2019-08-10/elon-musk-says-he-supports-2020-white-house-hopeful-andrew-yang>). *Bloomberg*. Retrieved August 10, 2019.
67. "Elon Musk, SpaceX Founder, Battles Entrenched Rivals Over NASA Contracts" ([http://www.huffingtonpost.com/2013/02/20/elon-musk-spacex\\_n\\_2727312.html](http://www.huffingtonpost.com/2013/02/20/elon-musk-spacex_n_2727312.html)). *The Huffington Post*. February 20, 2013. Retrieved May 30, 2015.
68. "Obama and Congress at odds over Elon Musk" (<https://web.archive.org/web/20150530204604/http://www.fightforvotes.com/obama-and-congress-at-odds-over-elon-musk/>). *fightforvotes.com*. Archived from the original (<http://www.fightforvotes.com/obama-and-congress-at-odds-over-elon-musk/>) on May 30, 2015. Retrieved May 30, 2015.
69. Timothy P. Carney, "Carney: Green stimulus profiteer comes under IRS scrutiny" (<http://www.washingtonexaminer.com/carney-green-stimulus-profiteer-comes-under-irs-scrutiny/article/2510619>), *WashingtonExaminer.com*, October 14, 2012.
70. "SpaceX blasts off literally and politically" (<http://sunlightfoundation.com/blog/2012/05/22/spacex-blasts-literally-and-politically>). Sunlight Foundation. Retrieved May 30, 2015.
71. Salant, Jonathan D. (September 27, 2013). "Billionaires Battle as Bezos-Musk Companies Vie for Launch Pad" (<https://www.bloomberg.com/news/articles/2013-09-27/billionaires-battle-as-bezos-musk-companies-vie-for-launch-pad>). *Bloomberg Business*. Retrieved July 1, 2015.
72. Steven Kovach, "Elon Musk Says He Quit Mark Zuckerberg's PAC Because It Was Too Cynical" (<http://www.businessinsider.com/elon-musk-says-zuckerbergs-pac-cynical-2013-5>), *BusinessInsider.com*, May 31, 2013.
73. Becker, Sean (December 11, 2013). "Elon Musk Donated to Anti-Science Republicans" (<http://mic.com/articles/76165/elon-musk-donated-to-anti-science-republicans>). *Mic*. Policy.Mic. Retrieved June 10, 2015.
74. Werber, Cassie. "Elon Musk says tax-free carbon is 'the dumbest experiment in history'" (<http://qz.com/564782/elon-musk-says-tax-free-carbon-is-the-dumbest-experiment-in-history/>). *Quartz*. Retrieved August 30, 2016.
75. "Taxpayer Subsidies Helped Tesla Motors, So Why Does Elon Musk Slam Them?" (<https://www.motherjones.com/politics/2013/10/tesla-motors-free-ride-elon-musk-government-subsidies>). *Mother Jones*. Retrieved April 19, 2015.
76. Harkinson, Josh (September 2013). "Taxpayer Subsidies Helped Tesla Motors, So Why Does Elon Musk Slam Them?" (<https://www.motherjones.com/politics/2013/10/tesla-motors-free-ride-elon-musk-government-subsidies?page=2>). *Mother Jones*. Retrieved June 10, 2015.
77. Hirsch, Jerry (May 30, 2015). "Elon Musk's growing empire is fuelled by billion in government subsidies" (<http://www.latimes.com/business/la-fi-hy-musk-subsidies-20150531-story.html#page=1>). *Los Angeles Times*. Retrieved June 2, 2015.
78. "Going to Mars with Elon Musk" (<https://web.archive.org/web/20160108144324/http://www.oninnovation.com/videos/detail.aspx?video=1549&title=Going+to+Mars>). *OnInnovation.com*. June 2008. Archived from the original (<http://www.oninnovation.com/videos/detail.aspx?video=1549&title=Going+to+Mars>) on January 8, 2016. Retrieved June 10, 2015.
- Going To Mars (<https://www.thehenryford.org/explore/stories-of-innovation/visionaries/elon-musk/#gallery-video=JkNm43MTToXXZ5r2zNap-Ixa5FkAkaILW>) (alt link retrieved Feb 2, 2018)
79. "Elon Musk and Rainn Wilson discuss colonizing Mars, global warming, and the fear of failure" (<https://www.theverge.com/2013/3/19/4122624/elon-musk-mars-colony-terraforming-spacex-video-rainn-wilson-metaphysical-milkshake>). *The Verge*. March 19, 2013. Retrieved June 12, 2015.

80. "Elon Musk, CEO and CTO, Space Exploration Technologies Corp (SpaceX), Peter Diamandis, CEO, X Prize Foundation and John Doerr, Venture Capital, Kleiner Perkins Caufield & Byers" (<https://www.youtube.com/watch?v=s3RICVtQ6mA>). YouTube. Retrieved November 4, 2015.
81. Anderson, Ross (September 30, 2014). "The Elon Musk Interview on Mars Colonization" (<https://aeon.co/magazine/technology/the-elon-musk-interview-on-mars>). *Aeon*. Retrieved June 10, 2015.
82. Gibbs, Samuel (October 27, 2014). "Elon Musk: artificial intelligence is our biggest existential threat" (<https://www.theguardian.com/technology/2014/oct/27/elon-musk-artificial-intelligence-ai-biggest-existential-threat>). *The Guardian*. Retrieved December 15, 2015.
83. "Elon Musk and Stephen Hawking think we should ban killer robots" (<https://www.washingtonpost.com/news/the-switch/wp/2015/07/28/elon-musk-and-stephen-hawking-think-we-should-ban-killer-robots/>). *Washington Post*. July 28, 2015. Archived (<https://web.archive.org/web/20160308074506/http://www.washingtonpost.com/news/the-switch/wp/2015/07/28/elon-musk-and-stephen-hawking-think-we-should-ban-killer-robots/>) from the original on March 8, 2016. Retrieved January 5, 2017.
84. Hern, Alex (June 18, 2014). "Elon Musk says he invested in DeepMind over 'Terminator' fears" (<https://www.theguardian.com/technology/2014/jun/18/elon-musk-deepmind-ai-tesla-motors>). Retrieved June 10, 2015 – via The Guardian.
85. Kosoff, Maya (January 15, 2015). "Elon Musk Is Donating Million To Keep Killer Robots From Taking Over The World" (<http://www.businessinsider.com/elon-musk-donates-10-million-to-the-future-of-life-institute-2015-1>). *Business Insider*. Retrieved December 15, 2015.
86. Muoio, Danielle (December 11, 2015). "Elon Musk just announced a new artificial intelligence research company" (<http://www.techinsider.io/elon-musk-just-announced-a-new-artificial-intelligence-research-company-2015-12>). Tech Insider. Retrieved December 11, 2015.
87. "We are living in a computer simulation, Elon Musk says" (<https://www.independent.co.uk/life-style/gadgets-and-tech/news/elon-musk-ai-artificial-intelligence-computer-simulation-gaming-virtual-reality-a7060941.html>). *The Independent*. June 2, 2016. Retrieved June 30, 2016.
88. Clifford, Catherine (July 24, 2017). "Mark Zuckerberg: Elon Musk's doomsday AI predictions are irresponsible" (<https://www.cnbc.com/2017/07/24/mark-zuckerberg-elon-musk-s-doomsday-ai-predictions-are-irresponsible.html>). *www.cnbc.com*. Retrieved April 26, 2019.
89. Elkus, Adam (October 31, 2014). "Don't Fear Artificial Intelligence" ([http://www.slate.com/articles/technology/future\\_tense/2014/10/elon\\_musk\\_artificial\\_intelligence\\_why\\_you\\_shouldn\\_t\\_be\\_afraid\\_of\\_ai.html](http://www.slate.com/articles/technology/future_tense/2014/10/elon_musk_artificial_intelligence_why_you_shouldn_t_be_afraid_of_ai.html)). *Slate*. Retrieved May 15, 2016.
90. Artificial Intelligence Alarmists Win ITIF's Annual Luddite Award (<https://itif.org/publications/2016/01/19/artificial-intelligence-alarmists-win-itif%E2%80%99s-annual-luddite-award>), ITIF Website, January 19, 2016
91. "'Artificial intelligence alarmists' like Elon Musk and Stephen Hawking win 'Luddite of the Year' award" (<https://www.independent.co.uk/life-style/gadgets-and-tech/news/elon-musk-stephen-hawking-luddite-award-of-the-year-itif-a6821921.html>). *The Independent (UK)*. January 19, 2016. Retrieved February 25, 2018.
92. Price, Emily (December 24, 2015). "Elon Musk nominated for 'luddite' of the year prize over artificial intelligence fears" (<https://www.theguardian.com/technology/2015/dec/24/elon-musk-nominated-for-luddite-of-the-year-prize-over-artificial-intelligence-fears>). *The Guardian*. Retrieved February 25, 2018.
93. "Anticipating artificial intelligence" (<http://www.nature.com/news/anticipating-artificial-intelligence-1.19825>). *Nature*. 532 (7600): 413. April 26, 2016. Bibcode:2016Natur.532Q.413. (<https://ui.adsabs.harvard.edu/abs/2016Natur.532Q.413>). doi:10.1038/532413a (<https://doi.org/10.1038/532413a>). PMID 27121801 (<https://www.ncbi.nlm.nih.gov/pubmed/27121801>).
94. Murray Shanahan (November 3, 2015). "Machines may seem intelligent, but it'll be a while before they actually are" (<https://www.washingtonpost.com/news/in-theory/wp/2015/11/03/machines-may-seem-intelligent-but-itll-be-a-while-before-they-actually-are/>). *The Washington Post*. Retrieved February 26, 2018.
95. Brown, Mike (December 15, 2017). "Elon Musk Sparks Heated Twitter Debate Over Boring Company's Vision" (<https://www.inverse.com/article/39433-elon-musk-sparks-heated-twitter-debate-over-boring-company-s-vision>). *Inverse*. Retrieved December 23, 2017.
96. Hunt, Elle (December 21, 2017). "I met my wife on a train platform: Twitter responds to Elon Musk with positive public transport stories" (<https://www.theguardian.com/cities/2017/dec/21/elon-musk-public-transport-transit-painful-twitter>). *The Guardian*. ISSN 0261-3077 (<https://www.worldcat.org/issn/0261-3077>). Retrieved December 23, 2017.
97. Marshall, Aarian (December 14, 2017). "Elon Musk Really Doesn't Like Mass Transit Systems He's Trying to Build" (<https://www.wired.com/story/elon-musk-awkward-dislike-mass-transit/>). *WIRED*. Retrieved December 23, 2017.
98. Toderian, Brent (December 18, 2017). "Elon Musk may say bad things about public transit, but I asked Twitter to share their #GreatThingsThatHappenedOnTransit! As usual, Twitter responded in spades. Here are some of my favourites for posterity - please enjoy & share!" (<https://twitter.com/BrentToderian/status/942967831833993218>). *@BrentToderian*. Retrieved December 23, 2017.
99. Hamilton-Smith, Lexy (March 23, 2017). "Brisbane's urban planning 'average' and making residents sick, expert says" (<http://www.abc.net.au/news/2017-03-24/brisbane-planning-sick-cities-brent-toderian-heart-foundation/8381574>). *ABC News*. Retrieved December 26, 2017.
100. Morris, David Z. (December 16, 2017). "Elon Musk Calls Transit Expert 'An Idiot,' Says Public Transport 'Sucks'" (<http://fortune.com/2017/12/16/elon-musk-public-transport/>). *Fortune*. Retrieved December 23, 2017.
101. Walker, Jarrett (December 14, 2017). "In cities, @elonmusk's hatred of sharing space with strangers is a luxury (or pathology) that only the rich can afford. Letting him design cities is the essence of elite projection" (<https://twitter.com/humantransit/status/941386665519595521>). *@humantransit*. Retrieved December 23, 2017.
102. Walker, Jarrett (July 31, 2017). "The Dangers of Elite Projection — Human Transit" (<http://humantransit.org/2017/07/the-dangers-of-elite-projection.html>). *Human Transit*. Retrieved December 23, 2017.
103. Musk, Elon (December 14, 2017). "You're an idiot" (<https://twitter.com/elonmusk/status/941500121564332032>). *@elonmusk*. Retrieved December 23, 2017.
104. Musk, Elon (December 14, 2017). "Sorry" (<https://twitter.com/elonmusk/status/941505105420881921>). *@elonmusk*. Retrieved December 23, 2017.
105. Musk, Elon (December 14, 2017). "Meant to say 'sanctimonious idiot'" (<https://twitter.com/elonmusk/status/941551760799277056>). *@elonmusk*. Retrieved December 23, 2017.
106. Krugman, Paul (December 19, 2017). "Elon Musk's idea of a cogent argument: 'You're an idiot'" (<http://fortune.com/2017/12/16/elon-musk-public-transport/> ...) (<https://twitter.com/paulkrugman/status/943105389800951809>) *@paulkrugman*. Retrieved December 23, 2017.
107. "Musk Foundation" (<http://www.muskfoundation.org/>). *www.muskfoundation.org*.
108. "Elon Musk and SolarCity Donate Solar Power Project to Coastal Response Center in Alabama" (<https://web.archive.org/web/20111005170916/http://eon.businesswire.com/news/eon/20101214005733/en/Elon-Musk/SolarCity/Obama>). *Enhanced Online News*.

Business Wire. Archived from the original (<http://eon.businesswire.com/news/eon/20101214005733/en/Elon-Musk/SolarCity/Obama>) on October 5, 2011.

- [09]. "Elon Musk Donates Solar Power Project to Soma City in Fukushima Prefecture, Japan" (<http://www.businesswire.com/news/home/20110729005291/en/Elon-Musk-Donates-Solar-Power-Project-Soma>). BusinessWire.com. Retrieved April 27, 2014.
- [10]. "What it's like to own a Tesla Model S – Part 2 – The Oatmeal" ([http://theoatmeal.com/comics/tesla\\_model\\_s2](http://theoatmeal.com/comics/tesla_model_s2)). theoatmeal.com.
- [11]. Kumparak, Greg. "Elon Musk Donates Million to the Oatmeal's Nikola Tesla Museum" (<https://techcrunch.com/2014/07/10/elon-musk-donates-1-million-to-the-oatmeals-nikola-tesla-museum/>). TechCrunch. AOL. Retrieved November 4, 2015.
- [12]. *Elon Musk donates M to keep AI beneficial* (<http://futureoflife.org/2015/10/12/elon-musk-donates-10m-to-keep-ai-beneficial>), Future of Life Institute, 2015, retrieved January 20, 2015
- [13]. "Elon Musk Donates M To Make Sure AI Doesn't Go The Way of Skynet" (<http://mashable.com/2015/01/13/elon-musk-stephen-hawking-artificial-intelligence>). Mashable. 2015. Retrieved June 21, 2015.
- [14]. "Elon Musk" (<http://www.xprize.org/about/board-of-trustees/elon-musk>). XPRIZE. Retrieved April 19, 2015.
- [15]. Kroll, Luisa (April 19, 2012). "The Giving Pledge Signs on 12 More Wealthy Americans Including Tesla's Elon Musk And Home Depot's Arthur Blank" (<https://www.forbes.com/sites/luisakroll/2012/04/19/the-giving-pledge-signs-on-12-more-wealthy-americans-including-teslas-elon-musk-and-home-depots-arthur-blank>). Forbes.
- [16]. Zdanowicz, Christina (October 8, 2018). "Flint schools are getting safe water fountains thanks to Elon Musk" (<https://www.cnn.com/2018/10/08/us/elon-musk-flint-schools-water-filtration-trnd/index.html>). CNN. Retrieved October 14, 2018.
- [17]. Gonzalez, Oscar. "ACLU Thanks Elon Musk for Being a 'Top Donor'" (<https://www.inverse.com/article/46184-aclu-respond-to-elon-musk-donor-claims>). Inverse.
- [18]. Cuthbertson, Anthony (October 31, 2019). "ELON MUSK PLEDGES 1 MILLION TREES TO TEAMTREE CAMPAIGN AND CHANGES TWITTER NAME TO TREELON" (<https://www.independent.co.uk/life-style/gadgets-and-tech/news/elon-musk-trees-twitter-treelon-teamtrees-mrbeast-youtube-campaign-a9177361.html>). Independent. Retrieved November 18, 2019.
- [19]. Cheok, Melissa (October 31, 2019). "Musk Donates 1 Million Trees to Global Reforestation Campaign" (<https://www.bloomberg.com/news/articles/2019-10-30/musk-donates-1-million-trees-to-global-reforestation-campaign>). Bloomberg. Retrieved November 18, 2019.
- [20]. Strub, Chris (October 29, 2019). "Elon Musk Donates \$1 Million To #TeamTrees, Changes Twitter Identity To 'Treelon'" (<https://www.forbes.com/sites/chrisstrub/2019/10/29/teamtrees/#58735ff25f6e>). Forbes. Retrieved November 18, 2019.
- [21]. "Tosca Musk profile at" (<http://www.muskentertainment.com/toscamusk.html>). Musk entertainment.
- [22]. Durand Streisand, Elizabeth. "A Look at Elon Musk's Rocky Romantic History" (<https://www.yahoo.com/celebrity/blogs/celeb-news/elon-musk-love-life-romantic-history-171340935.html>). Yahoo. Retrieved May 29, 2017.
- [23]. Junod, Justine (November 14, 2012). "Elon Musk: Triumph of His Will" (<http://www.esquire.com/news-politics/a16681/elon-musk-interview-1212/>). Esquire. Retrieved November 28, 2012.
- [24]. Justine Musk | TEDxUIUC (<https://www.youtube.com/watch?v=OxA0LESuUDE&t=23s>) (posted June 1, 2017)
- [25]. Elliott, Hannah. "Elon Musk – In Photos: Forbes Life Elon Musk" (<https://www.forbes.com/pictures/mkm45figed/elon-musk-4/>). Forbes. Retrieved November 4, 2015.
- [26]. Lai, Jennifer (January 19, 2012). "Elon Musk Divorce: Announces Split From Talulah Riley On Twitter" ([http://www.huffingtonpost.com/2012/01/19/elon-musk-divorce\\_n\\_1216394.html](http://www.huffingtonpost.com/2012/01/19/elon-musk-divorce_n_1216394.html)). The Huffington Post. Retrieved July 23, 2013.
- [27]. "Elon Musk Divorce: Announces Split From Talulah Riley On Twitter" ([http://www.huffingtonpost.com/2012/01/19/elon-musk-divorce\\_n\\_1216394.html](http://www.huffingtonpost.com/2012/01/19/elon-musk-divorce_n_1216394.html)), The Huffington Post, January 19, 2012.
- [28]. "Elon Musk and Talulah Riley divorce for a second time" (<https://www.telegraph.co.uk/news/2016/10/22/elon-musk-and-talulah-riley-divorce-for-a-second-time/>). The Telegraph. October 22, 2016. ISSN 0307-1235 (<https://www.worldcat.org/issn/0307-1235>). Retrieved June 29, 2018.
- [29]. "Actor Talulah Riley files to divorce billionaire Elon Musk, again" (<https://www.theguardian.com/technology/2016/mar/21/elon-musk-talulah-riley-file-divorce-second-marriage>). The Guardian. March 21, 2016. Retrieved April 20, 2016.
- [30]. "Billionaire Elon Musk's wife files for divorce" (<http://mashable.com/2016/03/21/elon-musk-divorce/#6zidD2gBOGqs>), Mashable.com, March 21, 2016.
- [31]. Kimble, Lindsay (November 18, 2016). "Elon Musk and Talulah Riley Are Divorced for a Second Time" (<http://people.com/movies/elon-musk-and-talulah-riley-divorced/>). People. Retrieved April 24, 2017.
- [32]. Ross, Martha (August 6, 2017). "Tesla CEO Elon Musk breaks up with Amber Heard, report says" (<http://www.mercurynews.com/2017/08/06/elon-musk-breaks-up-with-amber-heard-report-says/>). The Mercury News. Retrieved August 24, 2017.
- [33]. "Elon Musk and Amber Heard Call it Quits ... Again" (<https://people.com/movies/elon-musk-amber-heard-call-quits-again>). PEOPLE.com. Retrieved December 10, 2018.
- [34]. "Grimes is dating Elon Musk" (<https://consequenceofsound.net/2018/05/grimes-is-dating-elon-musk-report/>). Consequence of Sound. May 7, 2018. Retrieved May 8, 2018.
- [35]. Darville, Jordan (March 20, 2019). "Grimes talks new music, Elon Musk, plans to publicly execute her musical persona" (<https://www.thefader.com/2019/03/20/grimes-interview-miss-anthropocene>). The Fader.
- [36]. Antonelli, William (December 14, 2019). "Elon Musk made a surprise appearance at one of the biggest gaming events of the year to support his girlfriend, Grimes" (<https://www.businessinsider.com/elon-musk-game-awards-grimes-cyberpunk-2077-2019-12>). Business Insider (in German). Retrieved December 14, 2019.
- [37]. PowerfulJRE (September 7, 2018), *Joe Rogan Experience #1169 - Elon Musk* (<https://www.youtube.com/watch?v=ycPr5-27vSI>), retrieved September 12, 2018
- [38]. Ohlheiser, Abby (September 7, 2018). "Analysis - YouTubers might be just the renewable resource that Elon Musk needs" (<https://www.washingtonpost.com/news/the-intersect/wp/2018/09/07/youtubers-might-be-just-the-renewable-resource-that-elon-musk-needs/>). Washington Post. Retrieved September 12, 2018.
- [39]. "Tesla exodus: Another executive exits as Elon Musk struggles to build mainstream automaker" (<https://www.usatoday.com/story/money/business/2018/09/12/yet-another-finance-executive-leaving-tesla/1284197002/>). USA TODAY. Retrieved September 16, 2018.
- [40]. "Elon Musk's Pot-Smoking Podcast Appearance Could Open an Air Force Investigation into SpaceX" (<http://fortune.com/2018/09/10/musk-weed-marijuana-air-force-spacex/>). Fortune. Retrieved September 12, 2018.
- [41]. "The Air Force is determining 'the appropriate process' for Elon Musk smoking pot" (<https://www.theverge.com/2018/9/7/17833208/elon-musk-air-force-pot-smoking-investigation>). The Verge. Retrieved September 16, 2018.
- [42]. Donaghey, River (December 7, 2018). "Elon Musk Has 'No Idea' How to Smoke Weed, Says Elon Musk" ([https://www.vice.com/en\\_ca/article/xwj5pa/elon-musk-weed-i-have-no-idea-how-to-smoke-pot-vgrn](https://www.vice.com/en_ca/article/xwj5pa/elon-musk-weed-i-have-no-idea-how-to-smoke-pot-vgrn)). Vice. Retrieved March 21, 2019.
- [43]. *Priorities in Space Science Enabled by Nuclear Power And Propulsion* ([https://books.google.com/?id=H1\\_1faKxwh-IIC&pg=PT10&dq](https://books.google.com/?id=H1_1faKxwh-IIC&pg=PT10&dq)

43. "Honors in Space Science Enabled by Nuclear Power and Propulsion" (<https://books.google.com/books?id=H2LdKXW-004pg-1>). The National Academies Press. 2006. ISBN 9780309180108. Retrieved November 4, 2015.
44. Chafkin, Max (December 1, 2007). "Entrepreneur of the Year, 2007: Elon Musk" (<http://www.inc.com/magazine/20071201/entrepreneur-of-the-year-elon-musk.html>). inc.com.
45. "Tesla Roadster" ([https://web.archive.org/web/20120118131526/http://www.indexaward.dk/index.php?option=com\\_content&view=article&id=89&Itemid=71](https://web.archive.org/web/20120118131526/http://www.indexaward.dk/index.php?option=com_content&view=article&id=89&Itemid=71)). Index. 2007. Archived from the original ([http://www.indexaward.dk/index.php?option=com\\_content&view=article&id=89&Itemid=71](http://www.indexaward.dk/index.php?option=com_content&view=article&id=89&Itemid=71)) on January 18, 2012.
46. "Tesla Motors team" ([http://www.teslamotors.com/media/company\\_team.php](http://www.teslamotors.com/media/company_team.php)). Tesla Motors.
47. "SpaceX successfully launches Falcon 1 to orbit" (<https://web.archive.org/web/20130126130419/http://www.spacex.com/press.php?page=20080928>). Space Exploration Technologies Corp. 2008. Archived from the original (<http://www.spacex.com/press.php?page=20080928>) on January 26, 2013. Retrieved May 29, 2012.
48. "Connie Awards" (<https://web.archive.org/web/20090629052954/http://www.nwf.org/about/connieawards2008.cfm>). National Wildlife Federation. 2008. Archived from the original (<http://www.nwf.org/about/connieawards2008.cfm>) on June 29, 2009.
49. "Space Community Gathers at National Space Society's ISDC 2009" (<http://www.nss.org/news/releases/pr20090617.html>) (Press release). National Space Society. June 17, 2009.
50. Favreau, Jon (April 29, 2010). "The 2010 Time 100" ([http://www.time.com/time/specials/packages/article/0,28804,1984685\\_1984745\\_1985495,00.html](http://www.time.com/time/specials/packages/article/0,28804,1984685_1984745_1985495,00.html)). Time.
51. "Barron Hilton and Elon Musk honoured with the highest FAI awards" (<https://web.archive.org/web/20150419204916/http://www.fai.org/envc-awards/envc-news-awards/35094-barron-hilton-and-elon-musk-honoured-with-the-highest-awards>). Fédération Aéronautique Internationale. December 16, 2010. Archived from the original (<http://www.fai.org/envc-awards/envc-news-awards/35094-barron-hilton-and-elon-musk-honoured-with-the-highest-awards>) on April 19, 2015. Retrieved March 25, 2015.
52. "Living Legend of Aviation Awards" (<http://www.prnewswire.com/news-releases/7th-annual-living-legends-of-aviation-awards-ceremony-to-honor-tom-cruise-dr-edwin-buzz-aldrin-and-other-aviation-legends-81274087.html>). Kittie Hawk Air Academy. 2010. Retrieved November 4, 2015.
53. Smith, Jacquelyn (February 14, 2011). "America's 20 Most Powerful CEOs 40 And Under" (<https://www.forbes.com/2011/02/14/most-powerful-ceos-40-under-leadership-leaders-young.html>). Forbes. Retrieved February 18, 2011. "To make this list, you had to be the chief executive of one of the 20 biggest publicly traded companies in the U.S. (as of Feb. 11, by market capitalization) with a CEO aged 40 or under."
54. Dula, Art (June 16, 2011). "Heinlein Prize Honors Elon Musk of SpaceX" (<https://web.archive.org/web/20150402101614/http://www.heinleinprize.com/2011/07/heinlein-prize-2011-awarded-to-elon-musk/>). The Heinlein Prize. Archived from the original (<http://www.heinleinprize.com/2011/07/heinlein-prize-2011-awarded-to-elon-musk/>) on April 2, 2015.
55. "2012 RAeS Gold Medal" (<https://web.archive.org/web/20121128025956/http://media.aerosociety.com/aerospace-insight/2012/11/23/video-elon-musk-interview/7553/>). Archived from the original (<http://media.aerosociety.com/aerospace-insight/2012/11/23/video-elon-musk-interview/7553/>) on November 28, 2012.
56. Welsh, Jonathan (November 21, 2013). "Tesla's Elon Musk is Fortune Businessperson of the Year" (<https://blogs.wsj.com/speakeasy/2013/11/21/teslas-elon-musk-is-fortune-businessperson-of-the-year>). The Wall Street Journal.
57. "Elon Musk accepts the Explorers Club President Award (2014.3.16)" (<https://www.youtube.com/watch?v=zNrFQ432xww>) – via www.youtube.com.
58. "IEEE Honorary Membership Recipients" ([https://web.archive.org/web/20110629021316/http://www.ieee.org/documents/hon\\_mem\\_rl.pdf](https://web.archive.org/web/20110629021316/http://www.ieee.org/documents/hon_mem_rl.pdf)) (PDF). IEEE. Archived from the original ([http://www.ieee.org/documents/hon\\_mem\\_rl.pdf](http://www.ieee.org/documents/hon_mem_rl.pdf)) (PDF) on June 29, 2011. Retrieved March 25, 2015.
59. "The top 10 business visionaries creating value for the world" (<http://www.businessinsider.com/top-ten-business-visionaries-creating-value-for-the-world-2016-6>). Business Insider. Business Insider Inc.
60. "2017 Honourees - Business for Peace Foundation" (<https://web.archive.org/web/20181005153309/http://businessforpeace.org/2017-honourees/>). Business for Peace Foundation. Archived from the original (<http://businessforpeace.org/2017-honourees/>) on October 5, 2018. Retrieved October 19, 2018.
61. "Press release: Elon Musk wins the Oslo Business for Peace Award 2017 - Business for Peace Foundation" (<http://businessforpeace.no/press-release-elon-musk-wins-the-oslo-business-for-peace-award-2017/>). Business for Peace Foundation. March 28, 2017. Retrieved October 19, 2018.
62. "Justifications for the 2017 Business for Peace Honourees" (<http://businessforpeace.no/wp-content/uploads/2017/03/Justifications-for-the-2017-Business-for-Peace-Honourees.pdf>) (PDF). Business for Peace Foundation. 2017. Retrieved October 19, 2018.
63. "The Story of 2017 Honouree Elon Musk" (<http://businessforpeace.no/wp-content/uploads/2017/04/The-story-of-2017-Honouree-Elon-Musk.pdf>) (PDF). Business for Peace Foundation. 2017. Retrieved October 19, 2018.
64. China, American Chamber of Commerce in South. "Two Americans among Winners of 2017 Oslo Business for Peace Award" (<https://www.prnewswire.com/news-releases/south-china-businessman-wins-2017-oslo-business-for-peace-award---the-highest-award-a-global-businessperson-can-receive-300459109.html>). www.prnewswire.com. Retrieved October 19, 2018.
65. "2017 Business for Peace Award winners named - ICC - International Chamber of Commerce" (<https://iccwbo.org/media-wall/news-speeches/2017-business-peace-award-winners-named/>). ICC - International Chamber of Commerce. March 28, 2017. Retrieved October 19, 2018.
66. ราชกิจจานุเบกษา (March 21, 2019). "ประกาศสำนักนายกรัฐมนตรี เรื่อง พระราชทานเครื่องราชอิสริยาภรณ์อันเป็นที่สรรเสริญยิ่งดิเรกคุณาภรณ์ให้แก่บุคคลที่ช่วยเหลือผู้ประสบภัยในถ้ำหลวง วนอุทยานถ้ำหลวง-ขุนน้ำนางนอน จังหวัดเชียงราย" ([http://www.ratchakitcha.soc.go.th/DATA/PDF/2562/B/007/T\\_0001.PDF](http://www.ratchakitcha.soc.go.th/DATA/PDF/2562/B/007/T_0001.PDF)) (PDF) (in Thai). Retrieved March 22, 2019.
67. Tate, Ryan. "10 Awkward Hollywood Cameos by Tech Founders" (<https://www.wired.com/2012/09/founders-awkward-hollywood-cameos/>). Wired.com. Wired.com. Archived (<https://web.archive.org/web/20171201034116/https://www.wired.com/2012/09/founders-awkward-hollywood-cameos/>) from the original on December 1, 2017. Retrieved December 1, 2017.
68. "Elon Musk SpaceX Tesla on the Simpsons – Business Insider" (<http://www.businessinsider.com/elon-musk-spacex-tesla-on-the-simpsons-2015-1>). Business Insider. January 27, 2015. Retrieved April 19, 2015.
69. "Tesla CEO Elon Musk To Appear on Upcoming Episode of the Big Bang Theory - CBS.com" ([http://www.cbs.com/shows/big\\_bang\\_theory/news/1004869/tesla-ceo-elon-musk-to-appear-on-upcoming-episode-of-the-big-bang-theory/](http://www.cbs.com/shows/big_bang_theory/news/1004869/tesla-ceo-elon-musk-to-appear-on-upcoming-episode-of-the-big-bang-theory/)). CBS. Retrieved December 4, 2015.
70. McCarthy, Tyler. "Young Sheldon Episode 6 recap: Sheldon discovers physics" (<http://www.foxnews.com/entertainment/2017/11/30/young-sheldon-episode-6-recap-sheldon-discovers-physics.html>). Fox News. Archived (<https://web.archive.org/web/20171201031538/http://www.foxnews.com/entertainment/2017/11/30/young-sheldon-episode-6-recap-sheldon-discovers-physics.html>) from the original



on December 1, 2017. Retrieved December 1, 2017.

- [71]. Field, Kyle. "Tesla Stars In "Racing Extinction" Documentary" (<http://cleantechnica.com/2015/12/02/tesla-stars-racing-extinction-documentary/>). *CleanTechnica*. Retrieved July 11, 2016.
- [72]. Bova, Dan. "'Why Him?' Director on Elon Musk's Amazing 'I Can't Come to Work Today' Excuse" (<https://www.entrepreneur.com/video/286858>). *entrepreneur.com*. Retrieved January 29, 2017.
- [73]. Emily Stephens (December 6, 2016). "New Girl plays to its weaknesses and "Es Good" " (<https://tv.avclub.com/new-girl-plays-to-its-weaknesses-and-es-good-1798190115>). *AV Club*. Retrieved May 23, 2019.
- [74]. "'DC's Legends of Tomorrow' Power Rankings, Week 2: Burn, Baby, Burn – Observer" (<http://observer.com/2016/01/dcs-legends-of-tomorrow-power-rankings-week-2-burn-baby-burn>). *Observer*. January 29, 2016. Retrieved February 7, 2016.
- [75]. Boyle, Alan. "'Star Trek: Discovery' ranks Elon Musk alongside Wright Brothers and warp drive" (<https://www.geekwire.com/2017/star-trek-discovery-elon-musk/>). *Geekwire.com*. Geek Wire. Archived (<https://web.archive.org/web/20171013134142/https://www.geekwire.com/2017/star-trek-discovery-elon-musk/>) from the original on October 13, 2017. Retrieved October 13, 2017.
- [76]. Mack, Eric. "How Elon Musk goes down in history with the Wright Brothers" (<https://www.cnet.com/news/elon-musk-star-trek-wright-brothers-mars-spacex/>). *CNET.com*. CNET. Archived (<https://web.archive.org/web/20171013134422/https://www.cnet.com/news/elon-musk-star-trek-wright-brothers-mars-spacex/>) from the original on October 13, 2017. Retrieved October 13, 2017.
- [77]. Etherington, Darrell. "Elon Musk gets a nod as a space pioneer from 'Star Trek: Discovery' " (<https://techcrunch.com/2017/10/09/elon-musk-gets-a-nod-as-a-space-pioneer-from-star-trek-discovery/>). *Techcrunch.com*. Tech Crunch. Archived (<https://web.archive.org/web/20171013134811/https://techcrunch.com/2017/10/09/elon-musk-gets-a-nod-as-a-space-pioneer-from-star-trek-discovery/>) from the original on October 13, 2017. Retrieved October 13, 2017.
- [78]. PewDiePie (February 22, 2019), *Will Smith hosts Meme Review* (<https://www.youtube.com/watch?v=zpWYQ1YtgnI>), retrieved February 23, 2019
- [79]. "Elon Musk pokes fun at himself while hosting PewDiePie's popular Meme Review" (<https://www.theverge.com/2019/2/22/18232335/elon-musk-pewdiepie-meme-review-youtube-tesla-justin-roiland>). *The Verge*. Retrieved February 23, 2019.
- [80]. Schedeen, Jesse. "'Elon Musk's Rick and Morty Cameo Finally Explains His 'Elon Tusk' Twitter Joke'" (<https://www.ign.com/articles/2019/11/25/elon-musk-rick-and-morty-cameo-elon-tusk>). *IGN.com*. IGN. Retrieved November 25, 2019.

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## Further reading

- Davenport, Christian. *The Space Barons; Elon Musk, Jeff Bezos, and the Quest to Colonize the Cosmos*. PublicAffairs (2018). ISBN 978-1610398299
- Fernholz, Tim. *Rocket Billionaires: Elon Musk, Jeff Bezos, and the New Space Race*. Houghton Mifflin Harcourt (2018). ISBN 978-1-328-66223-1
- Vance, Ashlee. *Elon Musk: How the Billionaire CEO of SpaceX and Tesla is Shaping our Future*. Virgin Books (2015). ISBN 9780753555620. Afterthoughts by Ashlee Vance (<http://energyfuse.org/ashlee-vance-separates-fact-from-fiction-on-elon-musk-ceo-of-tesla-and-spacex/>)

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## External links

- Appearances (<https://www.c-span.org/person/?elonmusk>) on C-SPAN
- Elon Musk (<https://www.imdb.com/name/nm1907769/>) on IMDb
- Elon Musk ([https://www.ted.com/speakers/elon\\_musk](https://www.ted.com/speakers/elon_musk)) at TED
- Elon Musk (<https://twitter.com/elonmusk>) on Twitter

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