

Google Glass And Robotics Innovator Sebastian Thrun Stem Trailblazer Bios

Describes what inspired Nick Woodman to invent a camera that could be used anywhere and how he turned this vision into a successful business venture.

Biography of science educator, television host, mechanical engineer, and comedian Bill Nye.

Have you ever wished you could use technology to improve people's lives? Ever since he was a teenager, Sebastian Thrun wanted to build machines that helped people.So far, Thrun has developed robots that can be tour guides and nurses and can help save miners trapped underground. In 2004, he won a US Department of Defense contest by building a car that could drive itself. Since then, the self-driving cars he developed have been tested on more than 140,000 miles (225,308 kilometers) of road without fail! Thrun more recently developed a free website for onLine education and worked on Google Glass, a computer that can be worn like a pair of eyeglasses. But how did he get involved in all these cool projects? Follow his rise from a computer enthusiast to robotics innovator!

Wangari Maathai grew up in Kenya, where she learned the value of the natural world around her. As an adult, she fought for the environment and women's rights and earned the Nobel Peace Prize.

Readers will learn what it takes to succeed as a robotics engineer. The book also explains the necessary educational steps, useful character traits, and daily job tasks related to this career, in the framework of the STEAM, Science, Technology, Engineering, Art, and Math, movement. Photos, a glossary, and additional resources are included.

Robot Competitions

Computer Engineer Ruchi Sanghvi

Astronaut and Physicist Sally Ride

SpaceX and Tesla Motors Engineer Elon Musk

Super Soaker Inventor Lonnie Johnson

Markus Persson designed his first computer game when he was just eight years old. Learn how Perssons love of computers and design helped him the popular video game Minecraft.

This inspiring, STEM-focused biography describes the life and influential work of Ellen Ochoa, the first female Hispanic astronaut to go to space.

Describes Musk's work with a range of advanced technology companies, including PayPal, the space exploration company SpaceX, and the electric car company Tesla Motors, and discusses his plans for the future.

"Robot competitions are a fun way to test the designs of robots. Roboticians face off in exciting challenges, from playing soccer to completing search-and-rescue missions. Discover how competitions all around the world are challenging people to build incredible robots."

Have you ever watched a home video that went viral on the Internet? Then you've probably heard of the company YouTube. YouTube was created by Steve Chen, Chad Hurley, and Jawed Karim in 2005. When these three friends wanted to share a video from a party, they realized they were on to something. They thought other people would want an easy way to share videos online too. The website they built quickly became the most popular online video community in the world. But how did they go from tech-savvy young adults to founders of one of the Internet's most visited sites ? Discover how Chen, Hurley and Karim came together to build an international platform for video sharing.

Nuclear Physicist Chien-Shiung Wu

Astronaut Ellen Ochoa

Inventor, Engineer, and Physicist Nikola Tesla

Robotics Engineer

Animal Scientist and Activist Jane Goodall

Brian Greene's father taught him to look at the world in different ways. Years later, he started helping others understand the universe from new perspectives. Learn how Brian became a physics expert and bestselling author.

Do you love solving problems with mathematics? So did groundbreaking computer programmer Jean Bartik. She turned her passion for math into a successful career in what was then a brand-new field. During World War II, women took on more technology jobs as men joined the armed forces. Bartik started her career doing mathematical calculations for top-secret weapons systems projects. After the war, a new machine took over these calculations. It was the first all-electronic computer, and Bartik helped build and program it. But how did Bartik's interest in mathematics take her to the forefront of cutting-edge technology? Find out how she went from gifted student to software pioneer.

Google Glass and Robotics Innovator Sebastian ThrunLernerClassroom

Have you ever wondered who developed computer coding? Discover how Ada Lovelace's interest in mathematics led to her work on an early computer and the first programming algorithm ever used.

In middle school, Aprille Ericsson won second place in a science fair. She knew she wanted to keep creating science projects. Now she helps build spacecraft at NASA. Learn how Ericsson paved the way for future engineers.

Flickr Cofounder and Web Community Creator Caterina Fake

Google Glass and Robotics Innovator Sebastian Thrun

Humanoid Robots

A Practical Guide to Success

Astronaut Mae Jemison

Learn how Nancy Grace Roman followed her lifelong passion for astronomy and eventually became NASA's first chief of astronomya position that would allow her to shape the field for more than fifty years.

While watching Star Trek on television as a child, Mae Jemison was certain she would one day visit space. As an adult, she made this dream a reality when she became the first black female NASA astronaut. Jemison became a medical doctor before applying for NASA's Space Shuttle program. Then, in 1992, she blasted off on the shuttle Endeavour and conducted scientific experiments to test the effects of space on human bone cells. Jemison has dedicated her life to science education and to finding ways to use technology to help communities around the world. Find out how Jemison's passion for science led to her many impressive achievements.

Do you like to gaze at the stars? So did the young Stephen Hawking. Eventually, he turned his fascination with the night sky into a career of trying to figure out how the universe began and how it works. As a child, Hawking loved the stars and he loved math class. In college, he studied physics and cosmology, or how the universe came to be. But then he was diagnosed with amyotrophic lateral sclerosis (ALS), a disease that shuts down the nerves that control muscles. His doctors thought he had two years to live, so Hawking started working hard to meet his goals. He studied black holes and made discoveries that earned him recognition around the world. He wrote several books about the universe to help people understand his ideas. More than fifty years after his diagnosis, Hawking still has ALS, but he continues to ponder the night skies, trying to find one theory that will explain the universe.

Do you like to take pictures and share them online? Do you like to share comments on photos, places you've been, or articles? If so, you've probably heard of Flickr and other websites that Caterina Fake developed! Fake is always interested in making online sites into communities. She created Flickr and other websites that bring people together to share reviews, photos, thoughts, and more. Companies like Yahoo! and eBay have tapped her talent to make their websites more interactive and tailored to each visitor. But how did she get there? Find out how she went from a gifted student to helping people connect online!

As a kid, Joanna Kelley had fun solving the math and science challenges her parents invented. As an adult, she investigates the puzzles surrounding DNA, the set of instructions inside every living thing. Learn how Joanna became a genetics superstar.

Genetics Expert Joanna L. Kelley

iPod and Electronics Visionary Tony Fadell

Astrophysicist and Space Advocate Neil deGrasse Tyson

Mathematician and Computer Scientist Grace Hopper

Alternate Reality Game Designer Jane McGonigal

When she was young, Diana Trujillo dreamed of touching the stars. Then she became an aerospace engineer. She builds and uses tools that explore Mars and send the information back to Earth.

Have you ever dreamed of going to outer space? When Sally Ride was a little girl, she watched on TV as astronaut John Glenn launched into space. Twenty years later, she became the first American woman to go to space. Ride had loved science since she was young. Some of her teachers thought she was wasting her time studying science, but she went on to earn her PhD in astrophysics anyway. When NASA's astronaut training program opened to women, Ride quickly applied. Some people thought women couldn't handle space flight. But Ride worked hard and proved them all wrong. Later, she became a physics professor and started her own business to encourage young people to study science. Learn more about Ride's career as a NASA astronaut and educator.

After earning degrees studying animal behavior, Danielle Lee wanted to share her love of science with young people. Through urban outreach she has brought budding scientists into professional labs. She's walked them through the steps of the scientific method. And she's shown them that science doesn't have to be intimidating. In her popular Urban Scientist blog, Lee shares backyard science and outreach work. She also writes about her own research and other women and people of color. Discover what this influential scientist is doing to encourage the next generation of scientists.

Delivers a practical leadership approach that will thrive in today's healthcare environment This application-based text is designed to cultivate nursing and healthcare leaders who embrace the demands and opportunities of today's healthcare environment, which is rooted in innovation. Authored by world-class innovators and leaders in evidence-based healthcare practice, the book provides proven strategies to incorporate innovative and evidence-based leadership strategies into daily use to build creative, high-functioning, and sustainable organizations. The book differs from traditional academic texts by providing content that is practical, personal, and engaging. It provides a clear path for readers to integrate innovation and leadership principles into their careers and daily practice. The text is enhanced by individualized quotes and first-person accounts from healthcare industries. Chapters offer objectives and case studies. Other features include "Calls to Action" which will help readers develop leadership skills, and "Key Takeaway Points" to help remember important concepts. Podcasts conducted with prolific leaders illustrate the many challenges they have faced over the years. Key Features: Rooted in AACN Essentials for DNP and Master's Education Provides practical information on leadership, innovation, and entrepreneurship Includes best practice applications for healthcare and non-healthcare industries to improve outcomes in real-world settings Provides case studies, "Calls to Action," and "Key Takeaway Points" Includes podcasts with top healthcare leaders

"Lonnie Johnson was discouraged from becoming a scientist in school, but eventually became an engineer. Learn how Johnson overcame many challenges to become a brilliant engineer and inventor of one of the world's most popular toys, the Super Soaker."

Minecraft Creator Markus "Notch" Persson

NASA Astronomer Nancy Grace Roman

YouTube Founders Steve Chen, Chad Hurley, and Jawed Karim

Vaccine Innovators Pearl Kendrick and Grace Eldering

Programming Pioneer Ada Lovelace

Do you enjoy visiting animals at the zoo or playing with pets? As a child, Jane Goodall loved watching and interacting with animals. As an adult, she became a scientist working with chimpanzees in Africa. Goodall used unconventional research methods to observe chimpanzees in East Africa. She studied the chimpanzees' behavior and revealed their tool-making abilities. As Goodall grew older, she turned her attention to raising awareness about endangered species and inspiring individuals around the globe to take action. She is one of the world's best-known scientists and activists. But how did she get there? Find out how Goodall's passion for animals helped her become the face of conservationism.

Have you ever taken something apart to see how it works? As a child, Grace Hopper took apart five alarm clocks in a row, trying to figure out how all the pieces fit together. As an adult, she joined the Naval Reserve during World War II and worked on the world's first large-scale computer. After the war, Hopper served on a committee organized by the Department of Defense to create a standard computer language. That language, Common Business-Oriented Language, or COBOL, quickly became popular. How did a curious little girl grow up to become the "Grandmother of COBOL"? Learn how her outstanding innovations changed the field of computer programming.

Alan Turing loved math and science as a child. As an adult, he used his code-breaking skills to help the Allied Powers win World War II.

Have you ever been vaccinated against a particular disease? As children, Pearl Kendrick and Grace Eldering both suffered from whooping cough, a life-threatening illness. As adults, they worked together to create a revolutionary vaccine that saved thousands of lives each year. Eldering and Kendrick worked in a Michigan lab at a time when whooping cough was spreading around the country. Determined to stop the illness, the pair tested bacteria late into the night. Soon their new vaccine was helping children across the country. But how did they get there? Find out how Eldering and Kendrick's passion for fixing a problem led them to create an important vaccine.

What do you want to be when you grow up? When Katherine Johnson was young, women weren't expected to go into the math and science fields. Johnson loved math, but she never thought she could be a mathematician. After studying math in school and teaching for a few years, she learned that the organization that would later become NASA was hiring women to complete mathematical equations. As an African American woman, Johnson had to work hard to earn the respect of her coworkers, but they soon came to rely on her brilliant calculations. Her contributions to the US space program helped send astronauts to the moon. Learn how Johnson broke barriers as a female African American mathematician.

Google Cybersecurity Expert Parisa Tabriz

Theoretical Physicist Stephen Hawking

Mars Science Lab Engineer Diana Trujillo

Theoretical Physicist Brian Greene

NASA Mathematician Katherine Johnson

Do you spend hours tinkering with projects? Do you also love listening to and collecting music? So did inventor Tony Fadell. He combined two of his passions to create the iPod, the world's most popular music player. Even as a child, Fadell was curious about how things worked. He invented a new processor for his computer and sold it to Apple. Then he showed the idea to Fadell to create an iPod prototype, and he helped lead the team that revolutionized portable music players. How did he go from a curious kid to an innovator in electronics? Read on to find out about his brilliant ideas and remarkable career.

Have you ever wished you could use technology to improve people's lives? Ever since he was a teenager, Sebastian Thrun wanted to build machines that helped people. So far, Thrun has developed robots that can be tour guides and nurses and can help save miners trapped underground. In 2004, he won a US Department of Defense contest by building a car that could drive itself. Since then, the self-driving cars he developed have been tested on more than 140,000 miles (225,308 kilometers) of road without fail! Thrun more recently developed a free website for online education and worked on Google Glass, a computer that can be worn like a pair of eyeglasses. But how did he get involved in all these cool projects? Follow his rise from a computer enthusiast to robotics innovator!

Do you enjoy performing experiments or studying how the universe works? Growing up in China, Chien-Shiung Wu enjoyed learning about science. As an adult, she earned her PhD in physics and made a discovery that changed the field forever. Wu came to the United States to study physics. Soon she was a sought-after physics professor. She worked on government programs. She even helped disprove a major law of physics. But how did she get there? Find out how Wu's persistence drove her contributions in the field of physics.

Discusses Sanghvi's early life in India and education in the U.S., as well as how her work as the first female engineer at Facebook helped it become the largest social networking site in the world.

Have you ever stared into the night sky, full of stars and planets? As a kid, Neil deGrasse Tyson was star-struck when he first visited a planetarium. The universe was calling him. Tyson pursued his interest in astronomy and studied to be an astrophysicist. In 1996, he became the director of New York's Hayden Planetarium. He is passionate about science fun and easy to understand, he has hosted and appeared on TV shows such as Nova ScienceNow and The Daily Show with Jon Stewart. He even has more than one million Twitter followers! But how did he get there? Follow his path from fascinated kid to popular space expert.

Environmental Activist Wangari Maathai

Environmentalist Rachel Carson

Urban Biologist Danielle Lee

Computer Scientist Jean Bartik

Science Educator and Advocate Bill Nye

Humanoid robots can help us learn. They can go places humans can't, such as deep underwater, sending back information we never knew before. Humanoid robots can also aid in search and rescue—they are able to easily cross rough landscapes and carry heavy supplies. Discover how this cutting-edge technology was first created, and explore what kind of functions humanoid robots will perform in the future.

Do you enjoy spotting wild animals in the forest? As a little girl, Rachel Carson loved to explore the woods near her house. As an adult, she became an ecologist who helped change national policy and inspired people to protect the environment. While conducting research on wildlife, Carson noticed that the pesticides farmers used on crops were harming animals. Alarmed, she wrote Silent Spring, a book that led to the banning of several dangerous pesticides. How did Carson grow up to become one of the most influential environmentalists of the twentieth century? Discover how her interest in wildlife led to her remarkable career as a scientist and writer.

When Parisa Tabriz was a child she used her imaginative and competitive mind to outthink her brothers. As Google's "Security Princess," Tabriz protects computer users from Internet bad guys.

Do you like the challenge and adventure of video games? As Jane McGonigal was growing up, she had fun playing early video games. As an adult, she saw games as an outlet for problem solving and teambuilding. McGonigal started creating alternate reality games (ARGs), which may be based online but take place mainly in the real world. She enjoys challenging others to engage in modern issues and to work together, as in her game World Without Oil and in The Lost Ring, which she created for the 2008 Summer Olympics. McGonigal was named one of the world's top innovators by MIT's Technology Review, and her 2010 TED Talk, "Gaming Can Make a Better World," is one of the most-watched of all time. But how did she get there? Find out how she developed her passion for games to become the public face of game design.

As a child, Nikola Tesla saw a picture of a waterfall and imagined an invention that would harness the water's energy. Decades later, he invented the water wheel. Learn about this innovative inventor, who changed the world of electricity.

Facebook Founder and Internet Entrepreneur Mark Zuckerberg

Code-Breaker and Mathematician Alan Turing

Gopro Inventor Nick Woodman

Evidence-Based Leadership, Innovation and Entrepreneurship in Nursing and Healthcare

Have you ever shared a photo, played a game, or written a status update online? Learn how Mark Zuckerbergs love of programming helped him create the social networking site Facebook.

Aerospace Engineer Aprille Ericsson