



# Vivek Wadhwa

Technology & Innovation Author,  
Academic and Futurist

- Fellow/Professor, Harvard, Carnegie Mellon
- Syndicated columnist for The *Washington Post*
- Founder/CEO, Relativity Technologies
- Former EVP/CTO, Seer Technologies
- Author, *Your Happiness Was Hacked: Why Tech Is Winning the Battle to Control Your Brain--and How to Fight Back*
- Author, *The Driver in the Driverless Car: How Our Technology Choices Will Create the Future*

## Areas of Expertise

Technology | Strategy | Healthcare | Finance |  
Robotics | Manufacturing | Global Markets |  
Innovation | Disruption | Block Chain | Mobile |  
Quantum Computing | Future of Work | Talent

## Technology's Great Communicator

Vivek's background is impressive -- an Entrepreneur, Academic, Author, Keynote Speaker wrapped into a wonderfully vibrant and charismatic package. His research is focused on the critical advances in robotics, artificial intelligence, computing, synthetic biology, 3D printing, medicine, and nanomaterials, and how these advances are creating disruptive changes for companies, industries, governments and the culture at large.

Vivek just rejoined Harvard as a Distinguished Fellow, Harvard Law School, Labor, and Worklife Program, where he will help lead a critical three-year research project on the effects of technology on future employment and work. This will be the first study on how technology will affect the core foundations of our economy.

He is also currently a Distinguished Fellow at Carnegie Mellon University's College of Engineering, he teaches on CMU's Silicon Valley campus about the latest exponential technologies; technology convergence and industry disruption; risks and regulation; and the new rules of innovation. Vivek was also a Director of Research at Duke University's Pratt School of Engineering, Vice President of Innovation and Research at Singularity University, and Fellow at Stanford University's Rock Center for Corporate Governance, Harvard Law School, and Emory University. Remarkably, he has held as many as six simultaneous appointments at top universities.

Vivek's syndicated column for *The Washington Post* is one of the world's most popular columns on all things technology and innovation. His newest bestselling book is *Your Happiness Was Hacked: Why Tech Is Winning the Battle to Control Your Brain--and How to Fight Back*. Previous books include the award-winning, *The Driver in the Driverless Car: How Our Technology Choices Will Create the Future*, he also wrote *The Immigrant Exodus: Why America Is Losing the Global Race to Capture Entrepreneurial Talent*, which was named by *The Economist* as a Book of the Year of 2012, and *Innovating Women: The Changing Face of Technology*, for which the Financial Times named him #2 on its global list of the top ten men worth emulating.

This talent for communicating the complexities of global technological advancements in simple, almost poetic ways have made Vivek one of the most in-demand keynote speakers in the world. He gives more than 100 talks every year to the most prestigious and powerful audiences, including world leaders, CEOs, industry organizations, universities, entrepreneurship groups, and a multitude of national science and engineering academies.

He started his career as a software developer and gained a deep understanding of the challenges in building computer systems. His experience as Vice President of Information Services at investment banking powerhouse CS First Boston (CSFB), spearheading the development of technology for creating computer-aided software-writing systems, was so successful that CSFB decided to spin off that business unit into its own company, Seer Technologies. As its Executive Vice President and Chief Technology Officer, Wadhwa helped grow the nascent startup into a \$118 million publicly traded company.

The explosive growth of the Internet afforded Vivek with an even greater opportunity to help businesses adapt to new and fast-changing technologies, and founded Relativity Technologies. As a result of his vision, Forbes.com named Wadhwa a Leader of Tomorrow, and *Fortune* declared Relativity one of the 25 coolest companies in the world.

In 2012, the U.S. Government awarded Wadhwa distinguished recognition as an "Outstanding American by Choice", for his "commitment to this country and to the common civic values that unite us as Americans". He was also named one of the world's "Top 100 Global Thinkers" by *Foreign Policy* magazine in that year; in June 2013, he was on *TIME's* list of "Tech 40", one of forty of the most influential minds in tech; and in September 2015, he was second on a list of "ten men worth emulating" in the *Financial Times*.

## Speech Topics

### Navigating Technological Change at Light Speed

Unprecedented advances in technology have now made science fiction a reality. In only a handful of years, we've moved to the near worldwide use of handheld computing, the full mapping the human genome, and the advent of drones and driverless cars, to name just a few life-changing developments. This trajectory of technological advancement is only getting faster.

Based on his critically acclaimed new book *The Driver in the Driverless Car: How Our Technology Choices Will Create the Future*, Vivek Wadhwa not only explores the amazing technologies that are just now being integrated into our lives and work, but he also shares both the dilemmas and the solutions of technology advancement. Using his wonderfully vivid storytelling skills, he examines how Artificial Intelligence, Autonomous Machines, Robotics, Synthetic Biology, etc. are impacting fields of healthcare, education, transportation, energy development, investment management and more, analyzing the huge benefits as well as the economic and social consequences. He shares a three-pronged assessment that gauges whether a new technology will benefit everyone equally; whether the rewards outweigh the risks; and whether it promotes autonomy or leads to dependency.

Alongside a balanced evaluation of the impacts of both recently arrived technology or developments just around the corner, Vivek examines:

- How driverless cars are a perfect metaphor for our anxiety over where technology is headed
- What conditions make services or sectors ripe for a giant leap into the future
- Which industries stand to benefit most, and which will be upended
- Why Artificial Intelligence is both the most important breakthrough and the most dangerous technology ever created by man
- When, and if, society will accept robotic caregivers, housekeepers, and even warriors
- Whether cybersecurity can begin to keep up with our ubiquitous connectivity

This might be the most fascinating speech you will ever experience regarding our future.

## Disruption and Opportunity: How existing industries will be disrupted and new trillion-dollar industries will emerge

Not long ago, you could see your competition coming. Management guru Clayton Christensen coined the term "disruptive innovation" to describe how the competition worked: a new entrant attacked a market leader by launching low-end, low-priced products and then relentlessly improving them. Now Christensen's frameworks have themselves been disrupted...because you can no longer see the competition coming. Technologies are no longer progressing in a predictable linear fashion, but are advancing exponentially and converging. Fields such as computing, medicine, artificial intelligence, 3D printing, robotics, nanomaterials, and synthetic biology are advancing simultaneously, and combining these allows one industry to rapidly disrupt another before market leaders even know what has hit them.

Practically every industry will be disrupted over the next few years, including finance, insurance, healthcare, manufacturing, transportation, education, I.T. services, and communications. Very few of today's Fortune 500 companies will be on that list by the early 2020s. They will go the way of Blockbuster, Kodak, RIM, Compaq, and Nokia.

This is not all bad news, because disruption creates opportunities. New industries will emerge, and companies that lead the change will have the trillion dollar market capitalizations. Business executives need to understand that:

1. trillion dollar opportunities happen at the intersections of exponential technologies
2. disruptions are happening in every industry where technology can be applied
3. entrepreneurs can now do what only governments and big corporations could do before
4. if they don't disrupt themselves, they will be disrupted by startups from other industries

Businesses must learn the new rules of the innovation game and transform their employees into intrapreneurs who think and act like the Silicon Valley entrepreneurs who are gunning for Goliath.

Vivek Wadhwa will teach the basics of exponential technologies and convergence, provide examples of the disruptions that are underway in several industries, discuss the new rules of the innovation game, and challenge his audience members to think like today's technology entrepreneurs, and to build the new billion-dollar businesses within their companies.

## How Technology Will Eat Medicine: Future of Healthcare

When Apple announced that it was developing a watch that had the functions of a medical device, it became clear that the company was eyeing the \$3 trillion healthcare industry; that the tech industry sees medicine as the next frontier for exponential growth. Apple isn't alone. Companies such as Google, Microsoft, and Samsung and hundreds of startups also see the market potential and have big plans. They are about to disrupt health care in the same way in which Netflix decimated the video rental industry and Uber is changing transportation.

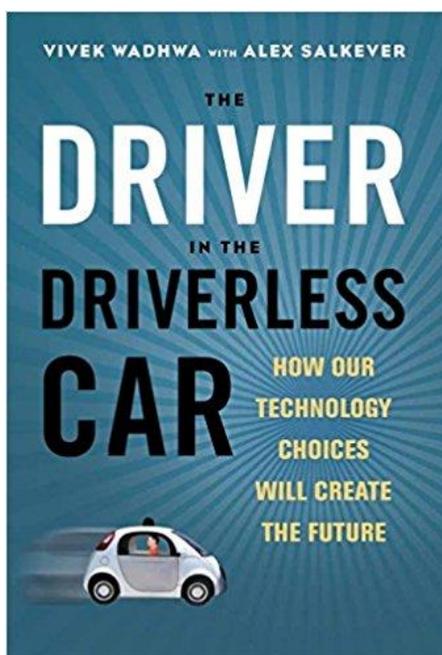
This is happening because several technologies such as computers, sensors, robotics, and artificial intelligence are advancing at exponential rates. Their power and performance are increasing dramatically as their prices fall and their footprints shrink.

We will soon have sensors that monitor almost every aspect of our body's functioning, inside and out. By combining these data with our electronic medical records and the activity and

lifestyle information that our smartphones observe, artificial intelligence-based systems will monitor us on a 24x7 basis. They will warn us when we are about to get sick and advise us on what medications we should take and how we should improve our lifestyle and habits. And with the added sensors and the apps that tech companies will build, our smartphone will become a medical device akin to the Star Trek tricorder. Technologies such as Apple ResearchKit are also going to change the way in which clinical trials are done. Data that our devices gather will be used to accurately analyze what medications patients have taken, in order to determine which of them truly had a positive effect; which simply created adverse reactions and new ailments; and which did both.

Combined with genomics data that are becoming available as plunging DNA-sequencing costs approach the costs of regular medical tests, a healthcare revolution is in the works. By understanding the correlations between genome, habits, and disease - as the new devices will facilitate - we will get closer and closer to an era of Precision Medicine, in which disease prevention and treatment are performed on the basis of people's genes, environments, and lifestyles. Vivek Wadhwa will give you a crash course in exponential technologies - such as computing, Artificial Intelligence, sensors, synthetic biology, and robotics - and describe how they will converge and help turn our sick-care system into one that can truly focus on health care.

## Books



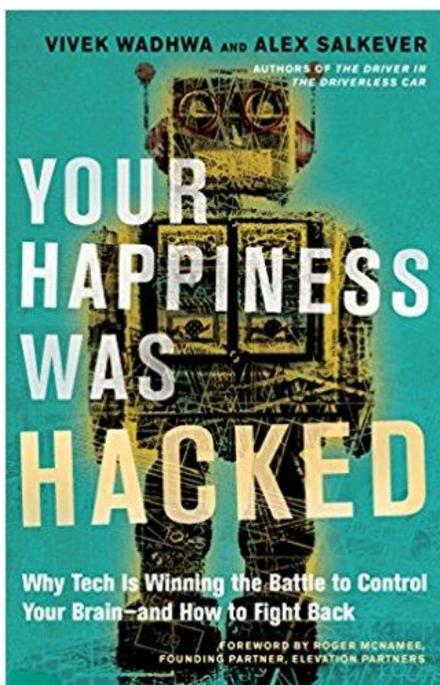
### *The Driver in the Driverless Car: How Our Technology Choices Will Create the Future*

A computer beats the reigning human champion of Go, a game harder than chess. Another is composing classical music. Labs are creating life-forms from synthetic DNA. A doctor designs an artificial trachea, uses a 3D printer to produce it, and implants it and saves a child's life.

Astonishing technological advances like these are arriving in increasing numbers. Scholar and entrepreneur Vivek Wadhwa uses this book to alert us to dozens of them and raise important questions about what they may mean for us. Breakthroughs such as personalized genomics, self-driving

vehicles, drones, and artificial intelligence could make our lives healthier, safer, and easier. But the same technologies raise the specter of a frightening, alienating future: eugenics, a jobless economy, complete loss of privacy, and ever-worsening economic inequality. As Wadhwa puts it, our choices will determine if our future is Star Trek or Mad Max.

Wadhwa offers us three questions to ask about every emerging technology: Does it have the potential to benefit everyone equally? What are its risks and rewards? And does it promote autonomy or dependence? Looking at a broad array of advances in this light, he emphasizes that the future is up to us to create—that even if our hands are not on the wheel, *we* will decide the driverless car’s destination.



### *Your Happiness Was Hacked: Why Tech Is Winning the Battle to Control Your Brain—and How to Fight Back*

Technology promises to help us achieve our dreams, connect us to everyone, and free up time--so why are we more miserable than ever? Wadhwa and Salkever show that our unhappiness can be traced to a concerted effort by tech companies to mold our thoughts and behavior to accomplish their goals.

For all its considerable benefits, many argue that technology has been instrumental in eroding security, privacy, and community. But Vivek Wadhwa and Alex Salkever argue that the truth is far more insidious: technology is actively robbing us of our happiness by making us so reliant on it that it becomes an addiction. Tech companies have all the weapons--sophisticated tracking bots, GPS coordinates, and algorithms that determine the optimal ways to distract us to their products and apps--even secret coding that defeats government monitoring and supervision--but Vivek and Salkever now provide us with insights and techniques to fight back. They focus on four key areas: Love, Work, Self, and Society. In each case, they document how the promise of technology has mutated into addiction and despair, and they lay out strategies to take back control by understanding the addictive mechanisms at the root of technology overload.