COS 490 Computers, Ethics and Society
Professor Harlan Onsrud
COURSE BIBLIOGRAPHY
Potential Course Readings
2019/2020

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[Audio Available] [2018 price: $6 paperback, $14 Kindle]
Walter Isaacson

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Bitlaw (1996 -2018) [free on-line]
Daniel A. Tysver

Intellectual Property and Cyberlaw: The Office of Public Interest Advising Insider's Guide (2013) – free
Harvard Law School (use pages 1-12)

CyberLaw: Text and Cases (2012)
Ferrera, Reder, Bird, Darrow, Aresty, Klosek, Lichtenstein

Cyberlaw: The Law of the Internet and Information Technology (2012)
Brian Craig

III. CRIME AND SECURITY

The Perfect Weapon: War, Sabotage, and Fear in the Cyber Age (2018) [2018 price: $16 hardcover, $15 Kindle]
David E. Sanger

Click Here to Kill Everybody: Security and Survival in a Hyper-connected World (2018)
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Dark Territory: The Secret History of Cyber War (2016)
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Cyberspies: The Secret History of Surveillance, Hacking, and Digital Espionage (2016)
Gordon Corera

Code Warriors: NSA's Codebreakers and the Secret Intelligence War Against the Soviet Union (2016)
Stephen Budiansky

Future Crimes: Everything Is Connected, Everyone Is Vulnerable and What We Can Do About It (2015),
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Cybersecurity and Cyberwar (2014)
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663 pages
Shoshana Zuboff

Cyber-risk and Youth: Digital Citizenship, Privacy and Surveillance (2018) 184 pages
Michael C Adorjan, Rosemary Ricciardelli [2018 price: $133 hardcover]

Privacy: A Short History (2016)
David Vincent

Intellectual Privacy: Rethinking Civil Rights in a Digital Age (2015) 220 pages
Neil Richards

Privacy in the Modern Age: The Search for Solutions (2015)
Marc Rotenberg, Jeramie Scott, Julia Horwitz (Editors)

Privacy Law Fundamentals, Third Edition (2015)
Daniel J. Solove and Paul M. Schwartz

Data and Goliath: The Hidden Battles to Collect Your Data and Control Your World (2015) [Audio Available]
Bruce Schneier

Information Privacy Fundamentals for Librarians and Information Professionals (2014) [2018 price: $38 paperback, $34 Kindle]
Cherie L. Givens

Technocreep: The Surrender of Privacy and the Capitalization of Intimacy (2014)
Thomas P. Keenan

Disappear Without a Trace (2014)
David Arthur

Age of Context: Mobile, Sensors, Data and the Future of Privacy (2013) [Audio Available]
Robert Scoble & Shel Israel

V. SOCIETY: ETHICS, PSYCHOLOGY, AND U.S. POLITICAL SYSTEM

These Truths: A History of the United States (2018)
by Jill Lepore

Architecture of a Technodemocracy: How Technology and Democracy Can Revolutionize Governments, Empower the 100%, and End the 1% System (2018)
by Jason M. Hanania

Winners Take All: The Elite Charade of Changing the World (2018)
by Anand Giridharadas

Everybody Lies: Big Data, New Data, and What the Internet Can Tell Us About Who We Really Are (2017) [2018 price: $19 hardcover, $12 Kindle]
by Seth Stephens-Davidowitz

Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy Paperback (2017) [2018 price: $11 paperback, $12 Kindle]
by Cathy O'Neil

The Power Paradox: How We Gain and Lose Influence (2017) [2018 price: $11 paperback, $6 Kindle]
by Dacher Keltner

Unstoppable: The Emerging Left-Right Alliance to Dismantle the Corporate State (2014)
Ralph Nader

The Righteous Mind: Why Good People Are Divided by Politics and Religion (2013)
Jonathan Haidt

Predisposed: Liberals, Conservatives, and the Biology of Political Differences (2013)
John R. Hibbing and Kevin B. Smith

The Little Blue Book: The Essential Guide to Thinking and Talking Democratic (2012)
George Lakoff and Elisabeth Wehling

Yes! 50 Scientifically Proven Ways to Be Persuasive (2009)
Noah J. Goldstein, Steve J. Martin and Robert Cialdini

VI. CYBER SOCIETY PERSPECTIVES ON EDUCATION AND BUSINESS

The Future of Work: Robots, AI, and Automation (2018) [2018 price: $17 paperback, $4 Kindle]
by Darrell M. West

The Industries of the Future (2017) [2018 price: $12 paperback, $13 Kindle]
By Alec Ross

Big Data in Practice: How 45 Successful Companies Used Big Data Analytics to Deliver Extraordinary Results (2016) [2018 price: $33 hardcover, $26 Kindle]
by Bernard Marr

Rise of the Robots: Technology and the Threat of a Jobless Future (2015) [2018 price: $12 paperback, $12 Kindle]
By Martin Ford

Big Data, Little Data, No Data (2015)
Christine L. Borgman

Big Data: A Revolution That Will Transform How We Live, Work, and Think (2014)
Viktor Mayer-Schönberger & Kenneth Cukier

The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies (2014)
Erik Brynjolfsson

Who Owns the Future? (2014) 396 pages
Jaron Lanier

Open: How We'll Work, Live and Learn in the Future (2013) 220 pages
David Price

One World Schoolhouse (2013) [Audio Available] 259 pages
Salman Khan

Alone Together: Why We Expect More from Technology and Less from Each Other (2012) [Audio Available]
Sherry Turkle

Now You See It: How Technology and Brain Science Will Transform Schools and Business for the 21st Century (2012)
Cathy N. Davidson

The Shallows: What the Internet is Doing to Our Brains (2011) [Audio Available]
Nicholas Carr

How Learning Works: Seven Research-Based Principles for Smart Teaching (2010)
Susan A. Ambrose and Michael W. Bridges

VII. PROJECT TEAMWORK

(material now covered more in software engineering and capstone courses)

Leading Project Teams: The Basics of Project Management and Team Leadership (2011)
Anthony T. Cobb

Teamwork and Teamplay (2010)
James Cain and Barry Jolliff

Building Team Power: How to Unleash the Collaborative Genius of Teams for Increased Engagement, Productivity, and Results (2010)
Thomas Kayser

Virtual Team Success: A Practical Guide for Working and Leading from a Distance (2010)
Richard Lepsinger and Darleen DeRosa

Extraordinary Groups: How Ordinary Teams Achieve Amazing Results
Geoffrey M. Bellman and Kathleen D. Ryan (2009)

Team-Based Learning: A Transformative Use of Small Groups in College Teaching (2004)
Larry K. Michaelsen

The Five Dysfunctions of a Team (2002) [Audio Available]
Patrick Lencioni

Quiet: The Power of Introverts in a World That Can't Stop Talking (2013) [Audio Available]
Susan Cain

VIII. COLLABORATION

(similar material now covered in software engineering and capstones)

Collaborative Learning Techniques: A Handbook for College Faculty (2014)
Elizabeth F. Barkley and Claire Howell Major

Harvard Business Review's 10 Must Reads on Collaboration (2013)
Harvard Business Review, Daniel Goleman, Richard E. Boyatzis & Morten Hansen

Designing Together: The Collaboration and Conflict Management Handbook for Creative Professionals (2013)
Daniel M. Brown

Creative Conspiracy: The New Rules of Breakthrough Collaboration (2013)
Leigh Thompson

Make Space: How to Set the Stage for Creative Collaboration (2012)
Scott Doorley, Scott Witthoft, and Hasso Plattner Institute of Design at Stanford University

IX. DESIGN

The Design of Everyday Things (2013) [Audio Available]
Donald Norman

Mobile Usability (2012)
Jakob Nielsen and Raluca Budiu

Observing the User Experience: A Practitioner's Guide to User Research (2nd Edition) (2012)
Elizabeth Goodman and Mike Kuniavsky

Product Design and Development, 5th Edition (2011)
Kent Ulrich and Steven Eppinger

Physical Computing: Sensing and Controlling the Physical World with Computers (2004)
O'Sullivan and Igoe

ANNOTATED BIBLIOGRAPHY
Note: Summaries under each resource were gathered from Amazon.com or other Internet sources.

I. HISTORY OF CYBER SOCIETY

The Innovators: How a Group of Hackers, Geniuses, and Geeks Created the Digital Revolution (2014)
Walter Isaacson (http://en.wikipedia.org/wiki/Walter_Isaacson)
Summary:
 Following his blockbuster biography of Steve Jobs, *The Innovators* is Walter Isaacson's revealing story of the people who created the computer and the Internet. It is destined to be the standard history of the digital revolution and an indispensable guide to how innovation really happens.
 What were the talents that allowed certain inventors and entrepreneurs to turn their visionary ideas into disruptive realities? What led to their creative leaps? Why did some succeed and others fail?
In his masterly saga, Isaacson begins with Ada Lovelace, Lord Byron's daughter, who pioneered computer programming in the 1840s. He explores the fascinating personalities that created our current digital revolution, such as Vannevar Bush, Alan Turing, John von Neumann, J.C.R. Licklider, Doug Engelbart, Robert Noyce, Bill Gates, Steve Wozniak, Steve Jobs, Tim Berners-Lee, and Larry Page. This is the story of how their minds worked and what made them so inventive. It's also a narrative of how their ability to collaborate and master the art of teamwork made them even more creative.
 For an era that seeks to foster innovation, creativity, and teamwork, *The Innovators* shows how they happen.

Note: Hundreds of books exist on each of the computers and society topics covered in this course. One example list from 2014 about books on the history of "computers and society" is contained in Making Digital History: 13 Books and Articles about Computers and Society.

II. CYBERLAW / INTERNET LAW

Bitlaw (1996 -2018)
Daniel A. Tysver (http://www.bitlaw.com/)
Summary:
Covers the basics of copyright, patent, trademark and Internet law in the U.S.
- Copyright Law in the United States - http://www.bitlaw.com/copyright/
- Patent Law in the United States - http://www.bitlaw.com/patent
- Trademark Law in the United States - http://www.bitlaw.com/trademark
- Internet Law - http://www.bitlaw.com/internet
Note: pdf compilation available in FirstClass Folder

Intellectual Property and Cyberlaw: The Office of Public Interest Advising Insider's Guide (2013)
Harvard Law School - free (use pages 1-12)
hls.harvard.edu/content/uploads/2008/06/ip-cyberlaw-guide-final.pdf
Summary:
 Covers largely the same topics as Bitlaw but lacking that extent of depth.

CyberLaw: Text and Cases (2012) 568 pages
Ferrera, Reder, Bird, Darrow, Aresty, Klosek, Lichtenstein
(https://faculty.bentley.edu/details.asp?uname=gferrera)
Summary:

This third edition guides readers through the complete business lifecycle--from idea to operation to dissolution--while examining the legal, managerial, and ethical issues affecting technology at each stage. Excerpted cases thoroughly explain the law in every chapter, while a running case about Google helps readers understand the real-world legal implications of operating a technology company today.

Cyberlaw: The Law of the Internet and Information Technology (2012)
Brian Craig (http://works.bepress.com/brian_craig/)
Summary:
Featuring the most current exploration of cyberlaw, *CYBERLAW* helps students understand the legal and policy issues associated with the Internet. Tackling a full range of legal topics, it includes discussion of jurisdiction, intellectual property, contracts, taxation, torts, computer crimes, online speech, defamation and privacy. Chapters include recent, relevant cases, discussion questions and exercises at the end of each chapter. Using a consistent voice and clear explanations, the author covers the latest developments in cyberlaw–from cases to legislation to regulations.

Wikipedia Introduction to CyberLaw Topics
- Copyright: http://en.wikipedia.org/wiki/Copyright
- Trademark: http://en.wikipedia.org/wiki/Trademark
- Patents: http://en.wikipedia.org/wiki/Patent
- Trade Secret: http://en.wikipedia.org/wiki/Trade_secret
- Privacy: http://en.wikipedia.org/wiki/Privacy

Summary:
Short summaries of concepts. Typically not as good as Bitlaw sources above but some links raise additional topics.

III. CRIME AND SECURITY

The Perfect Weapon: War, Sabotage, and Fear in the Cyber Age (2018)
David E. Sanger (https://en.wikipedia.org/wiki/David_E._Sanger)
Summary:
In 2015, Russian hackers tunneled deep into the computer systems of the Democratic National Committee, and the subsequent leaks of the emails they stole may have changed the course of American democracy. But to see the DNC hacks as Trump-centric is to miss the bigger, more important story: Within that same year, the Russians not only had broken into networks at the White House, the State Department, and the Joint Chiefs of Staff, but had placed implants in American electrical and nuclear plants that could give them the power to switch off vast swaths of the country. This was the culmination of a decade of escalating digital sabotage among the world's powers, in which Americans became the collateral damage as China, Iran, North Korea, and Russia battled in cyberspace to undercut one another in daily just-short-of-war conflict.

The Perfect Weapon is the startling inside story of how the rise of cyberweapons transformed geopolitics like nothing since the invention of the atomic bomb. Cheap to acquire, easy to deny, and usable for a variety of malicious purposes—from crippling infrastructure to sowing discord and doubt—cyber is now the weapon of choice for democracies, dictators, and terrorists. Two presidents—Bush and Obama—drew first blood with Operation Olympic Games, which used malicious code to blow up Iran's nuclear centrifuges, and yet America proved remarkably unprepared when its own weapons were stolen from its arsenal and, during President Trump's first year, turned back on the US and its allies. The government was often paralyzed, unable to threaten the use of cyberweapons because America was so vulnerable to crippling attacks on its own networks of banks, utilities, and government agencies.

Moving from the White House Situation Room to the dens of Chinese government hackers to the boardrooms of Silicon Valley, New York Times national security correspondent David Sanger—who broke the story of Olympic Games in his previous book—reveals a world coming face-to-face with the perils of technological revolution. The Perfect Weapon is the dramatic story of how great and small powers alike slipped into a new era of constant sabotage, misinformation, and fear, in which everyone is a target.

Click Here to Kill Everybody: Security and Survival in a Hyper-connected World (2018)
Bruce Schneier (https://en.wikipedia.org/wiki/Bruce_Schneier or https://www.schneier.com/)
Summary:

A world of "smart" devices means the Internet can kill people. We need to act. Now.

Everything is a computer. Ovens are computers that make things hot; refrigerators are computers that keep things cold. These computers—from home thermostats to chemical plants—are all online. The Internet, once a virtual abstraction, can now sense and touch the physical world.

As we open our lives to this future, often called the Internet of Things, we are beginning to see its enormous potential in ideas like driverless cars, smart cities, and personal agents equipped with their own behavioral algorithms. But every knife cuts two ways.

All computers can be hacked. And Internet-connected computers are the most vulnerable. Forget data theft: cutting-edge digital attackers can now crash your car, your pacemaker, and the nation's power grid. In Click Here to Kill Everybody, renowned expert and best-selling author Bruce Schneier examines the hidden risks of this new reality.

After exploring the full implications of a world populated by hyperconnected devices, Schneier reveals the hidden web of technical, political, and market forces that underpin the pervasive insecurities of today. He then offers common-sense choices for companies, governments, and individuals that can allow us to enjoy the benefits of this omnipotent age without falling prey to its vulnerabilities.

From principles for a more resilient Internet of Things, to a recipe for sane government regulation and oversight, to a better way to understand a truly new environment, Schneier's vision is required reading for anyone invested in human flourishing.

Dark Territory: The Secret History of Cyber War (2016)
Fred Kaplan (https://en.wikipedia.org/wiki/Fred_Kaplan_(journalist))
Summary:

"A consistently eye-opening history...not just a page-turner but consistently surprising." —The New York Times

"A book that grips, informs, and alarms, finely researched and lucidly related." —John le Carré

As cyber-attacks dominate front-page news, as hackers join terrorists on the list of global threats, and as top generals warn of a coming cyber war, few books are more timely and enlightening than Dark Territory: The Secret History of Cyber War, by Slate columnist and Pulitzer Prize–winning journalist Fred Kaplan.

Kaplan probes the inner corridors of the National Security Agency, the beyond-top-secret cyber units in the Pentagon, the "information warfare" squads of the military services, and the national security debates in the White House, to tell this never-before-told story of the officers, policymakers, scientists, and spies who devised this new form of warfare and who have been planning—and (more often than people know) fighting—these wars for decades.

From the 1991 Gulf War to conflicts in Haiti, Serbia, Syria, the former Soviet republics, Iraq, and Iran, where cyber warfare played a significant role, Dark Territory chronicles, in fascinating detail, a little-known past that shines an unsettling light on our future.

Cyberspies: The Secret History of Surveillance, Hacking, and Digital Espionage (2016)
Gordon Corera (https://en.wikipedia.org/wiki/Gordon_Corera)

Summary:
    The previously untold—and previously highly classified—story of the conflux of espionage and technology, with a compelling narrative rich with astonishing revelations taking readers from World War II to the internet age.
    As the digital era become increasingly pervasive, the intertwining forces of computers and espionage are reshaping the entire world; what was once the preserve of a few intelligence agencies now affects us all.
    Corera's compelling narrative takes us from the Second World War through the Cold War and the birth of the internet to the present era of hackers and surveillance. The book is rich with historical detail and characters, as well as astonishing revelations about espionage carried out in recent times by the UK, US, and China. Using unique access to the National Security Agency, GCHQ, Chinese officials, and senior executives from some of the most powerful global technology companies, Gordon Corera has gathered compelling stories from heads of state, hackers and spies of all stripes.
    Cyberspies is a ground-breaking exploration of the new space in which the worlds of espionage, diplomacy, international business, science, and technology collide.

Code Warriors: NSA's Codebreakers and the Secret Intelligence War Against the Soviet Union (2016)

Stephen Budiansky (https://en.wikipedia.org/wiki/Stephen_Budiansky)

Summary:
    A sweeping, in-depth history of NSA, whose famous "cult of silence" has left the agency shrouded in mystery for decades
    The National Security Agency was born out of the legendary codebreaking programs of World War II that cracked the famed Enigma machine and other German and Japanese codes, thereby turning the tide of Allied victory. In the postwar years, as the United States developed a new enemy in the Soviet Union, our intelligence community found itself targeting not soldiers on the battlefield, but suspected spies, foreign leaders, and even American citizens. Throughout the second half of the twentieth century, NSA played a vital, often fraught and controversial role in the major events of the Cold War, from the Korean War to the Cuban Missile Crisis to Vietnam and beyond.
    In Code Warriors, Stephen Budiansky—a longtime expert in cryptology—tells the fascinating story of how NSA came to be, from its roots in World War II through the fall of the Berlin Wall. Along the way, he guides us through the fascinating challenges faced by cryptanalysts, and how they broke some of the most complicated codes of the twentieth century. With access to new documents, Budiansky shows where the agency succeeded and failed during the Cold War, but his account also offers crucial perspective for assessing NSA today in the wake of the Edward Snowden revelations. Budiansky shows how NSA's obsession with recording every bit of data and decoding every signal is far from a new development; throughout its history the depth and breadth of the agency's reach has resulted in both remarkable successes and destructive failures.
    Featuring a series of appendixes that explain the technical details of Soviet codes and how they were broken, this is a rich and riveting history of the underbelly of the Cold War, and an essential and timely read for all who seek to understand the origins of the modern NSA.

Future Crimes: Everything Is Connected, Everyone Is Vulnerable and What We Can Do About It (2015)

Marc Goodman (http://www.marcgoodman.net/about/)

Summary:
    One of the world's leading authorities on global security, Marc Goodman takes readers deep into the digital underground to expose the alarming ways criminals, corporations, and even countries are using new and emerging technologies against you—and how this makes everyone more vulnerable than ever imagined.
    Technological advances have benefited our world in immeasurable ways, but there is an ominous flip

side: our technology can be turned against us. Hackers can activate baby monitors to spy on families, thieves are analyzing social media posts to plot home invasions, and stalkers are exploiting the GPS on smart phones to track their victims' every move. We all know today's criminals can steal identities, drain online bank accounts, and wipe out computer servers, but that's just the beginning. To date, no computer has been created that could not be hacked—a sobering fact given our radical dependence on these machines for everything from our nation's power grid to air traffic control to financial services.

Yet, as ubiquitous as technology seems today, just over the horizon is a tidal wave of scientific progress that will leave our heads spinning. If today's Internet is the size of a golf ball, tomorrow's will be the size of the sun. Welcome to the Internet of Things, a living, breathing, global information grid where every physical object will be online. But with greater connections come greater risks. Implantable medical devices such as pacemakers can be hacked to deliver a lethal jolt of electricity and a car's brakes can be disabled at high speed from miles away. Meanwhile, 3-D printers can produce AK-47s, bioterrorists can download the recipe for Spanish flu, and cartels are using fleets of drones to ferry drugs across borders.

With explosive insights based upon a career in law enforcement and counterterrorism, Marc Goodman takes readers on a vivid journey through the darkest recesses of the Internet. Reading like science fiction, but based in science fact, *Future Crimes* explores how bad actors are primed to hijack the technologies of tomorrow, including robotics, synthetic biology, nanotechnology, virtual reality, and artificial intelligence. These fields hold the power to create a world of unprecedented abundance and prosperity. But the technological bedrock upon which we are building our common future is deeply unstable and, like a house of cards, can come crashing down at any moment.

Future Crimes provides a mind-blowing glimpse into the dark side of technological innovation and the unintended consequences of our connected world. Goodman offers a way out with clear steps we must take to survive the progress unfolding before us. Provocative, thrilling, and ultimately empowering, *Future Crimes* will serve as an urgent call to action that shows how we can take back control over our own devices and harness technology's tremendous power for the betterment of humanity—before it's too late.

Cybersecurity and Cyberwar (2014) 306 pgs
PW Singer and Allan Friedman (http://en.wikipedia.org/wiki/P._W._Singer, http://allan.friedmans.org/)
Summary:

A generation ago, "cyberspace" was just a term from science fiction, used to describe the nascent network of computers linking a few university labs. Today, our entire modern way of life, from communication to commerce to conflict, fundamentally depends on the Internet. And the cybersecurity issues that result challenge literally everyone: politicians wrestling with everything from cybercrime to online freedom; generals protecting the nation from new forms of attack, while planning new cyberwars; business executives defending firms from once unimaginable threats, and looking to make money off of them; lawyers and ethicists building new frameworks for right and wrong. Most of all, cybersecurity issues affect us as individuals. We face new questions in everything from our rights and responsibilities as citizens of both the online and real world to simply how to protect ourselves and our families from a new type of danger. And yet, there is perhaps no issue that has grown so important, so quickly, and that touches so many, that remains so poorly understood.

In *Cybersecurity and CyberWar: What Everyone Needs to Know®*, New York Times best-selling author P. W. Singer and noted cyber expert Allan Friedman team up to provide the kind of easy-to-read, yet deeply informative resource book that has been missing on this crucial issue of 21st century life. Written in a lively, accessible style, filled with engaging stories and illustrative anecdotes, the book is structured around the key question areas of cyberspace and its security: how it all works, why it all matters, and what can we do? Along the way, they take readers on a tour of the important (and entertaining) issues and characters of cybersecurity, from the "Anonymous" hacker group and the Stuxnet computer virus to the new cyber units of the Chinese and U.S. militaries. *Cybersecurity and CyberWar: What Everyone Needs to Know®* is the definitive account on the subject for us all, which comes not a

moment too soon.

Cyberwar will not take place (2013)
Thomas Rid (http://thomasrid.org/)
Summary:

"Cyber war is coming," announced a land-mark RAND report in 1993. In 2005, the U.S. Air Force boasted it would now fly, fight, and win in cyberspace, the "fifth domain" of warfare. This book takes stock, twenty years on: is cyber war really coming? Has war indeed entered the fifth domain?
Cyber War Will Not Take Place cuts through the hype and takes a fresh look at cyber security. Thomas Rid argues that the focus on war and winning distracts from the real challenge of cyberspace: non-violent confrontation that may rival or even replace violence in surprising ways.

The threat consists of three different vectors: espionage, sabotage, and subversion. The author traces the most significant hacks and attacks, exploring the full spectrum of case studies from the shadowy world of computer espionage and weaponised code. With a mix of technical detail and rigorous political analysis, the book explores some key questions: What are cyber weapons? How have they changed the meaning of violence? How likely and how dangerous is crowd-sourced subversive activity? Why has there never been a lethal cyber attack against a country's critical infrastructure? How serious is the threat of "pure" cyber espionage, of exfiltrating data without infiltrating humans first? And who is most vulnerable: which countries, industries, individuals?

IV. PRIVACY

The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power (2019)
Shoshana Zuboff (https://en.wikipedia.org/wiki/Shoshana_Zuboff)
Summary:

The challenges to humanity posed by the digital future, the first detailed examination of the unprecedented form of power called "surveillance capitalism," and the quest by powerful corporations to predict and control our behavior.

In this masterwork of original thinking and research, Shoshana Zuboff provides startling insights into the phenomenon that she has named surveillance capitalism. The stakes could not be higher: a global architecture of behavior modification threatens human nature in the twenty-first century just as industrial capitalism disfigured the natural world in the twentieth.

Zuboff vividly brings to life the consequences as surveillance capitalism advances from Silicon Valley into every economic sector. Vast wealth and power are accumulated in ominous new "behavioral futures markets," where predictions about our behavior are bought and sold, and the production of goods and services is subordinated to a new "means of behavioral modification."

The threat has shifted from a totalitarian Big Brother state to a ubiquitous digital architecture: a "Big Other" operating in the interests of surveillance capital. Here is the crucible of an unprecedented form of power marked by extreme concentrations of knowledge and free from democratic oversight. Zuboff's comprehensive and moving analysis lays bare the threats to twenty-first century society: a controlled "hive" of total connection that seduces with promises of total certainty for maximum profit--at the expense of democracy, freedom, and our human future.

With little resistance from law or society, surveillance capitalism is on the verge of dominating the social order and shaping the digital future--if we let it.

Cyber-risk and Youth: Digital Citizenship, Privacy and Surveillance (2018)

by Michael C Adorjan (https://soci.ucalgary.ca/profiles/michael-adorjan), Rosemary Ricciardelli (https://www.mun.ca/soc/people/faculty-profiles/rose-ricciardelli.php)
184 pages

Summary:

Cyber-risks are moving targets and societal responses to combat cyber-victimization are often met by the distrust of young people. Drawing on original research, this book explores how young people define, perceive, and experience cyber-risks, how they respond to both the messages they are receiving from society regarding their safety online, and the various strategies and practices employed by society in regulating their online access and activities. This book complements existing quantitative examinations of cyberbullying assessing its extent and frequency, but also aims to critique and extend knowledge of how cyber-risks such as cyberbullying are perceived and responded to.

Following a discussion of their methodology and their experiences of conducting research with teens, the authors discuss the social network services that teens are using and what they find appealing about them, and address teens' experiences with and views towards parental and school-based surveillance. The authors then turn directly to areas of concern expressed by their participants, such as relational aggression, cyberhacking, privacy and privacy management, as well as sexting. The authors conclude by making recommendations for policy makers, educators and teens – not only by drawing from their own theoretical and sociological interpretations of their findings, but from the responses and recommendations given by their participants about going online and tackling cyber-risk.

One of the first texts to explore how young people respond to attempts to regulate online activity, this book will be key reading for those involved in research and study surrounding youth crime, cybercrime, youth culture, media and crime, and victimology – and will inform those interested in addressing youth safety online how to best approach what is often perceived as a sensitive and volatile social problem.

Privacy: A Short History (2016)
David Vincent (http://www.open.ac.uk/people/dmv33)

Summary:

Privacy: A Short History provides a vital historical account of an increasingly stressed sphere of human interaction. At a time when the death of privacy is widely proclaimed, distinguished historian, David Vincent, describes the evolution of the concept and practice of privacy from the Middle Ages to the present controversy over digital communication and state surveillance provoked by the revelations of Edward Snowden.

Deploying a range of vivid primary material, he discusses the management of private information in the context of housing, outdoor spaces, religious observance, reading, diaries and autobiographies, correspondence, neighbours, gossip, surveillance, the public sphere and the state. Key developments, such as the nineteenth-century celebration of the enclosed and intimate middle-class household, are placed in the context of long-term development. The book surveys and challenges the main currents in the extensive secondary literature on the subject. It seeks to strike a new balance between the built environment and world beyond the threshold, between written and face-to-face communication, between anonymity and familiarity in towns and cities, between religion and secular meditation, between the state and the private sphere and, above all, between intimacy and individualism.

Ranging from the fourteenth century to the twenty-first, this book shows that the history of privacy has been an arena of contested choices, and not simply a progression towards a settled ideal. Privacy: A Short History will be of interest to students and scholars of history, and all those interested in this topical subject.

Intellectual Privacy: Rethinking Civil Rights in a Digital Age (2015)
Neil Richards (http://law.wustl.edu/faculty/pages.aspx?id=314)

Summary:

Most people believe that the right to privacy is inherently at odds with the right to free speech. Courts all over the world have struggled with how to reconcile the problems of media gossip with our

commitment to free and open public debate for over a century. The rise of the Internet has made this problem more urgent. We live in an age of corporate and government surveillance of our lives. And our free speech culture has created an anything-goes environment on the web, where offensive and hurtful speech about others is rife.

How should we think about the problems of privacy and free speech? In Intellectual Privacy, Neil Richards offers a different solution, one that ensures that our ideas and values keep pace with our technologies. Because of the importance of free speech to free and open societies, he argues that when privacy and free speech truly conflict, free speech should almost always win. Only when disclosures of truly horrible information are made (such as sex tapes) should privacy be able to trump our commitment to free expression. But in sharp contrast to conventional wisdom, Richards argues that speech and privacy are only rarely in conflict. America's obsession with celebrity culture has blinded us to more important aspects of how privacy and speech fit together. Celebrity gossip might be a price we pay for a free press, but the privacy of ordinary people need not be. True invasions of privacy like peeping toms or electronic surveillance will rarely merit protection as free speech. And critically, Richards shows how most of the law we enact to protect online privacy pose no serious burden to public debate, and how protecting the privacy of our data is not censorship.

More fundamentally, Richards shows how privacy and free speech are often essential to each other. He explains the importance of 'intellectual privacy,' protection from surveillance or interference when we are engaged in the processes of generating ideas - thinking, reading, and speaking with confidantes before our ideas are ready for public consumption. In our digital age, in which we increasingly communicate, read, and think with the help of technologies that track us, increased protection for intellectual privacy has become an imperative. What we must do, then, is to worry less about barring tabloid gossip, and worry much more about corporate and government surveillance into the minds, conversations, reading habits, and political beliefs of ordinary people.

A timely and provocative book on a subject that affects us all, Intellectual Privacy will radically reshape the debate about privacy and free speech in our digital age.

Privacy in the Modern Age: The Search for Solutions (2015)
Marc Rotenberg, Jeramie Scott, Julia Horwitz (Editors) (http://en.wikipedia.org/wiki/Marc_Rotenberg, https://www.linkedin.com/pub/jeramie-scott/2b/a86/516, https://www.linkedin.com/in/juliahorwitz)
Summary:

The threats to privacy are well known: the National Security Agency tracks our phone calls; Google records where we go online and how we set our thermostats; Facebook changes our privacy settings when it wishes; Target gets hacked and loses control of our credit card information; our medical records are available for sale to strangers; our children are fingerprinted and their every test score saved for posterity; and small robots patrol our schoolyards and drones may soon fill our skies.

The contributors to this anthology don't simply describe these problems or warn about the loss of privacy—they propose solutions. They look closely at business practices, public policy, and technology design, and ask, "Should this continue? Is there a better approach?" They take seriously the dictum of Thomas Edison: "What one creates with his hand, he should control with his head." It's a new approach to the privacy debate, one that assumes privacy is worth protecting, that there are solutions to be found, and that the future is not yet known. This volume will be an essential reference for policy makers and researchers, journalists and scholars, and others looking for answers to one of the biggest challenges of our modern day. The premise is clear: there's a problem—let's find a solution.

Privacy Law Fundamentals, Third Edition (2015)
Daniel J. Solove (https://en.wikipedia.org/wiki/Daniel_J._Solove) and Paul M. Schwartz
(https://en.wikipedia.org/wiki/Paul_M._Schwartz)
Summary:

The third edition of the popular Privacy Law Fundamentals text incorporates extensive developments in privacy law and includes an introductory chapter summarizing key new laws, cases and enforcement

actions. Privacy Law Fundamentals is no treatise-its accessible, portable format delivers vital information in a concise and digestible manner. It includes key provisions of privacy statutes; leading cases; tables summarizing the statutes (private rights of action, preemption, liquidated damages, etc.); summaries of key state privacy laws; an overview of FTC enforcement actions; and answers to frequently asked questions, including:

What are the key points in all the HHS resolution agreements for HIPAA violations?

What are the theories of harm in litigation for privacy and security cases and how well has each fared?

What are the most significant FTC privacy and data security cases of the past decade?

Data and Goliath: The Hidden Battles to Collect Your Data and Control Your World (2015)
Bruce Schneier (http://en.wikipedia.org/wiki/Bruce_Schneier)
Summary:
You are under surveillance right now. Your cell phone provider tracks your location and knows who's with you. Your online and in-store purchasing patterns are recorded, and reveal if you're unemployed, sick, or pregnant. Your e-mails and texts expose your intimate and casual friends. Google knows what you're thinking because it saves your private searches. Facebook can determine your sexual orientation without you ever mentioning it.

The powers that surveil us do more than simply store this information. Corporations use surveillance to manipulate not only the news articles and advertisements we each see, but also the prices we're offered. Governments use surveillance to discriminate, censor, chill free speech, and put people in danger worldwide. And both sides share this information with each other or, even worse, lose it to cybercriminals in huge data breaches.

Much of this is voluntary: we cooperate with corporate surveillance because it promises us convenience, and we submit to government surveillance because it promises us protection. The result is a mass surveillance society of our own making. But have we given up more than we've gained? In *Data and Goliath*, security expert Bruce Schneier offers another path, one that values both security and privacy. He shows us exactly what we can do to reform our government surveillance programs and shake up surveillance-based business models, while also providing tips for you to protect your privacy every day. You'll never look at your phone, your computer, your credit cards, or even your car in the same way again.

Information Privacy Fundamentals for Librarians and Information Professionals (2014)
Cherie L. Givens (https://www.linkedin.com/in/cheriegivens)
Summary:
As more information is collected, shared, and mined, the need to understand and manage information privacy has become a necessity for information professionals. Governments across the globe have enacted information privacy laws. These laws continue to evolve and the information privacy protections that have been established differ by country. A basic understanding of privacy law, information privacy approaches, and information security controls is essential for information professionals to properly manage private/personally identifiable information (PII) in differing capacities in libraries, academic institutions, corporations, hospitals, and state and federal agencies.

Understanding and knowledge of applicable privacy laws and the ability to write privacy policies and procedures for the proper handling of PII are crucial skills for librarians and other information managers.

Information Privacy Fundamentals for Librarians and Information Professionals is tailored to the needs of librarians and information professionals. It introduces library and information professionals to information privacy, provides an overview of information privacy in the library and information science context, U.S. privacy laws by sector, information privacy policy, and key considerations when planning and creating a privacy program.

Technocreep: The Surrender of Privacy and the Capitalization of Intimacy (2014)

Thomas P. Keenan (no obvious website showing credentials)

Summary:

"Technology is rapidly moving into our bodies," writes cyber expert Keenan, "and this book gives a chilling look ahead into where that road may lead us – on a one way trip to the total surrender of privacy and the commoditization of intimacy." Here is the definitive dissection of privacy-eroding and life-invading technologies, coming at you from governments, corporations, and the person next door.

Take, for example, "Girls Around Me": a Russian-made iPhone App that allowed anyone to scan the immediate vicinity for girls and women who checked in on Foursquare and had poorly secured Facebook profiles. It combined this information in a way never intended by the original poster. Going to a Disney theme park? Your creepy new "MagicBand" will alert Minnie Mouse that you're on the way and she'll know your kid's name when you approach her. Thinking about sending your DNA off to Ancestry.com for some "genetic genealogy"? Perhaps you should think again: your genetic information could be used against you.

With security scares like the Heartbleed bug (which compromised even supposedly safe internet behemoths like Google and Yahoo!) becoming more commonplace, this book is a must-read for anybody who values their privacy in a wired world.

Disappear Without a Trace (2014)
David Author

Summary:

A Concisely Written and Information Rich How To Book and Self-Help Guide, No Nonsense - No Fluff - No Mindless Filler, Everything You Need To Obtain an Anonymous New Name To Use As You See Fit, an Alternate Identity, New Credit, and an Anonymous Unlimited Future, Legally Disappear, Hide Your Digital Trail, Be Hidden, Protected, Safe, and become the Person You Always Wanted To Be, Inexpensive, Easy, Fast, and Legal Process Anyone Can Do

Note: There are many similar books available and this is just a sample. Others include: *How to Be Invisible: Protect Your Home, Your Children, Your Assets, and Your Life* (2012), J. J. Luna, and *How to Disappear: Erase Your Digital Footprint, Leave False Trails, and Vanish Without a Trace* (2010), [Audio Available], 204 pgs., Frank M. Ahearn and Eileen C. Horan.

Age of Context: Mobile, Sensors, Data and the Future of Privacy (2013) 225 pgs
Robert Scoble & Shel Israel (http://en.wikipedia.org/wiki/Robert_Scoble, http://en.wikipedia.org/wiki/Shel_Israel)

Summary:

In 2006, co-authors Robert Scoble and Shel Israel wrote Naked Conversations, a book that persuaded businesses to embrace what we now call social media. Six years later they have teamed up again to report that social media is but one of five converging forces that promise to change virtually every aspect of our lives. You know these other forces already: mobile, data, sensors and location-based technology. Combined with social media they form a new generation of personalized technology that knows us better than our closest friends. Armed with that knowledge our personal devices can anticipate what we'll need next and serve us better than a butler or an executive assistant. The resulting convergent superforce is so powerful that it is ushering in a era the authors call the Age of Context. In this new era, our devices know when to wake us up early because it snowed last night; they contact the people we are supposed to meet with to warn them we're running late. They even find content worth watching on television. They also promise to cure cancer and make it harder for terrorists to do their damage. Astoundingly, in the coming age you may only receive ads you want to see. Scoble and Israel have spent more than a year researching this book. They report what they have learned from interviewing more than a hundred pioneers of the new technology and by examining hundreds of contextual products. What does it all mean? How will it change society in the future? The authors are unabashed tech enthusiasts, but as they write, an elephant sits in the living room of our book and it is called privacy. We are entering a time when our technology serves us best because it watches us; collecting data on what we do, who we speak with, what we look at. There is

no doubt about it: Big Data is watching you. The time to lament the loss of privacy is over. The authors argue that the time is right to demand options that enable people to reclaim some portions of that privacy.

V. SOCIETY: ETHICS, PSYCHOLOGY, AND U.S. POLITICAL SYSTEM

These Truths: A History of the United States (2018)
Jill Lepore   https://scholar.harvard.edu/jlepore/home
Summary: *New York Times* Bestseller

In the most ambitious one-volume American history in decades, award-winning historian and *New Yorker* writer Jill Lepore offers a magisterial account of the origins and rise of a divided nation, an urgently needed reckoning with the beauty and tragedy of American history.

Written in elegiac prose, Lepore's groundbreaking investigation places truth itself—a devotion to facts, proof, and evidence—at the center of the nation's history. The American experiment rests on three ideas—"these truths," Jefferson called them—political equality, natural rights, and the sovereignty of the people. And it rests, too, on a fearless dedication to inquiry, Lepore argues, because self-government depends on it. But has the nation, and democracy itself, delivered on that promise?

These Truths tells this uniquely American story, beginning in 1492, asking whether the course of events over more than five centuries has proven the nation's truths, or belied them. To answer that question, Lepore traces the intertwined histories of American politics, law, journalism, and technology, from the colonial town meeting to the nineteenth-century party machine, from talk radio to twenty-first-century Internet polls, from Magna Carta to the Patriot Act, from the printing press to Facebook News.

Along the way, Lepore's sovereign chronicle is filled with arresting sketches of both well-known and lesser-known Americans, from a parade of presidents and a rogues' gallery of political mischief makers to the intrepid leaders of protest movements, including Frederick Douglass, the famed abolitionist orator; William Jennings Bryan, the three-time presidential candidate and ultimately tragic populist; Pauli Murray, the visionary civil rights strategist; and Phyllis Schlafly, the uncredited architect of modern conservatism.

Americans are descended from slaves and slave owners, from conquerors and the conquered, from immigrants and from people who have fought to end immigration. "A nation born in contradiction will fight forever over the meaning of its history," Lepore writes, but engaging in that struggle by studying the past is part of the work of citizenship. "The past is an inheritance, a gift and a burden," *These Truths* observes. "It can't be shirked. There's nothing for it but to get to know it."

Architecture of a Technodemocracy: How Technology and Democracy Can Revolutionize Governments, Empower the 100%, and End the 1% System (2018)
Jason M. Hanania (https://www.jasonhanania.com/about.html)
Summary:

The world is primed for radical changes in government where each of us has an equal voice and all are held accountable. In Architecture of a Technodemocracy, Hanania provides a detailed blueprint on how to leverage current government processes, communications systems, and blockchain security to take the next step in the evolution of human government. By harnessing technology that already exists, we can nonviolently reshape our respective governments. The cooperation of modern politicians is not a requirement. A technodemocracy can be created without spending any tax dollars, passing any new laws, or otherwise turning to career politicians for leadership. Like Bitcoin, technodemocracy uses readily available technologies to decentralize power from the 1% to the 100%. Its principles can be applied to any nation. Despite being drafted more than 200 years ago, the Constitution enables a U.S. technodemocratic republic. No nation in history has ever had such an absolute straightaway to a 100% democratic government—the opportunity to revolutionize society, economy, and environment without using violence.

Through illustrations, examples, and analogies, Architecture of a Technodemocracy provides an elegantly simple method for decentralizing power to 100% of the American people and, in the process, ending the U.S. political party system.

Winners Take All: The Elite Charade of Changing the World (2018)
Anand Giridharadas (http://www.anand.ly/)

An insider's groundbreaking investigation of how the global elite's efforts to "change the world" preserve the status quo and obscure their role in causing the problems they later seek to solve.

Former New York Times columnist Anand Giridharadas takes us into the inner sanctums of a new gilded age, where the rich and powerful fight for equality and justice any way they can--except ways that threaten the social order and their position atop it. We see how they rebrand themselves as saviors of the poor; how they lavishly reward "thought leaders" who redefine "change" in winner-friendly ways; and how they constantly seek to do more good, but never less harm. We hear the limousine confessions of a celebrated foundation boss; witness an American president hem and haw about his plutocratic benefactors; and attend a cruise-ship conference where entrepreneurs celebrate their own self-interested magnanimity.

Giridharadas asks hard questions: Why, for example, should our gravest problems be solved by the unelected upper crust instead of the public institutions it erodes by lobbying and dodging taxes? He also points toward an answer: Rather than rely on scraps from the winners, we must take on the grueling democratic work of building more robust, egalitarian institutions and truly changing the world. A call to action for elites and everyday citizens alike.

Everybody Lies: Big Data, New Data, and What the Internet Can Tell Us About Who We Really Are (2017)
Seth Stephens-Davidowitz (http://sethsd.com/)
Summary:

Blending the informed analysis of The Signal and the Noise with the instructive iconoclasm of Think Like a Freak, a fascinating, illuminating, and witty look at what the vast amounts of information now instantly available to us reveals about ourselves and our world—provided we ask the right questions.

By the end of an average day in the early twenty-first century, human beings searching the internet will amass eight trillion gigabytes of data. This staggering amount of information—unprecedented in history—can tell us a great deal about who we are—the fears, desires, and behaviors that drive us, and the conscious and unconscious decisions we make. From the profound to the mundane, we can gain astonishing knowledge about the human psyche that less than twenty years ago, seemed unfathomable.

Everybody Lies offers fascinating, surprising, and sometimes laugh-out-loud insights into everything from economics to ethics to sports to race to sex, gender and more, all drawn from the world of big data. What percentage of white voters didn't vote for Barack Obama because he's black? Does where you go to school effect how successful you are in life? Do parents secretly favor boy children over girls? Do violent films affect the crime rate? Can you beat the stock market? How regularly do we lie about our sex lives and who's more self-conscious about sex, men or women?

Investigating these questions and a host of others, Seth Stephens-Davidowitz offers revelations that can help us understand ourselves and our lives better. Drawing on studies and experiments on how we really live and think, he demonstrates in fascinating and often funny ways the extent to which all the world is indeed a lab. With conclusions ranging from strange-but-true to thought-provoking to disturbing, he explores the power of this digital truth serum and its deeper potential—revealing biases deeply embedded within us, information we can use to change our culture, and the questions we're afraid to ask that might be essential to our health—both emotional and physical. All of us are touched by big data everyday, and its influence is multiplying. Everybody Lies challenges us to think differently about how we see it and the world.

An Economist Best Book of the Year
A PBS NewsHour Book of the Year

An Entrepeneur Top Business Book
An Amazon Best Book of the Year in Business and Leadership
New York Times Bestseller

Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy Paperback (2017)
Cathy O'Neil (https://en.wikipedia.org/wiki/Cathy_O%27Neil)
Summary:

A former Wall Street quant sounds an alarm on the mathematical models that pervade modern life — and threaten to rip apart our social fabric.

We live in the age of the algorithm. Increasingly, the decisions that affect our lives—where we go to school, whether we get a car loan, how much we pay for health insurance—are being made not by humans, but by mathematical models. In theory, this should lead to greater fairness: Everyone is judged according to the same rules, and bias is eliminated.

But as Cathy O'Neil reveals in this urgent and necessary book, the opposite is true. The models being used today are opaque, unregulated, and uncontestable, even when they're wrong. Most troubling, they reinforce discrimination: If a poor student can't get a loan because a lending model deems him too risky (by virtue of his zip code), he's then cut off from the kind of education that could pull him out of poverty, and a vicious spiral ensues. Models are propping up the lucky and punishing the downtrodden, creating a "toxic cocktail for democracy." Welcome to the dark side of Big Data.

Tracing the arc of a person's life, O'Neil exposes the black box models that shape our future, both as individuals and as a society. These "weapons of math destruction" score teachers and students, sort résumés, grant (or deny) loans, evaluate workers, target voters, set parole, and monitor our health.

O'Neil calls on modelers to take more responsibility for their algorithms and on policy makers to regulate their use. But in the end, it's up to us to become more savvy about the models that govern our lives. This important book empowers us to ask the tough questions, uncover the truth, and demand change.
— Longlist for National Book Award (Non-Fiction)
— Goodreads, semi-finalist for the 2016 Goodreads Choice Awards (Science and Technology)
— Kirkus, Best Books of 2016
— New York Times, 100 Notable Books of 2016 (Non-Fiction)
— The Guardian, Best Books of 2016
— WBUR's "On Point," Best Books of 2016: Staff Picks
— Boston Globe, Best Books of 2016, Non-Fiction

The Power Paradox: How We Gain and Lose Influence (2017)
Dacher Keltner (https://en.wikipedia.org/wiki/Dacher_Keltner)
Summary:

A revolutionary and timely reconsideration of everything we know about power. Celebrated UC Berkeley psychologist Dr. Dacher Keltner argues that compassion and selflessness enable us to have the most influence over others and the result is power as a force for good in the world.

Power is ubiquitous—but totally misunderstood. Turning conventional wisdom on its head, Dr. Dacher Keltner presents the very idea of power in a whole new light, demonstrating not just how it is a force for good in the world, but how—via compassion and selflessness—it is attainable for each and every one of us.

It is taken for granted that power corrupts. This is reinforced culturally by everything from Machiavelli to contemporary politics. But how do we get power? And how does it change our behavior? So often, in spite of our best intentions, we lose our hard-won power. Enduring power comes from empathy and giving. Above all, power is given to us by other people. This is what we all too often forget, and it is the crux of the power paradox: by misunderstanding the behaviors that helped us to gain power in the first place we set ourselves up to fall from power. We abuse and lose our power, at work, in our

family life, with our friends, because we've never understood it correctly—until now. Power isn't the capacity to act in cruel and uncaring ways; it is the ability to do good for others, expressed in daily life, and in and of itself a good thing.

Dr. Keltner lays out exactly—in twenty original "Power Principles"—how to retain power; why power can be a demonstrably good thing; when we are likely to abuse power; and the terrible consequences of letting those around us languish in powerlessness.

Unstoppable: The Emerging Left-Right Alliance to Dismantle the Corporate State (2014)
Ralph Nader (http://en.wikipedia.org/wiki/Ralph_Nader)
Summary:

Ralph Nader has fought for over fifty years on behalf of American citizens against the reckless influence of corporations and their government patrons on our society. Now he ramps up the fight and makes a persuasive case that Americans are not powerless. In *Unstoppable*, he explores the emerging political alignment of the Left and the Right against converging corporate-government tyranny.

Large segments from the progressive, conservative, and libertarian political camps find themselves aligned in opposition to the destruction of civil liberties, the economically draining corporate welfare state, the relentless perpetuation of America's wars, sovereignty-shredding trade agreements, and the unpunished crimes of Wall Street against Main Street. Nader shows how Left-Right coalitions can prevail over the corporate state and crony capitalism.

He draws on his extensive experience working with grassroots organizations in Washington and reveals the many surprising victories by united progressive and conservative forces. As a participator in, and keen observer of, these budding alliances, he breaks new ground in showing how such coalitions can overcome specific obstacles that divide them, and how they can expand their power on Capitol Hill, in the courts, and in the decisive arena of public opinion.

Americans can reclaim their right to consume safe foods and drugs, live in healthy environments, receive fair rewards for their work, resist empire, regain control of taxpayer assets, strengthen investor rights, and make bureaucrats more efficient and accountable. Nader argues it is in the interest of citizens of different political labels to join in the struggle against the corporate state that will, if left unchecked, ruin the Republic, override our constitution, and shred the basic rights of the American people.

The Righteous Mind: Why Good People Are Divided by Politics and Religion (2013) 385 pgs
Jonathan Haidt (http://en.wikipedia.org/wiki/Jonathan_Haidt)
Summary:

As America descends deeper into polarization and paralysis, social psychologist Jonathan Haidt has done the seemingly impossible—challenged conventional thinking about morality, politics, and religion in a way that speaks to everyone on the political spectrum. Drawing on his twenty five years of groundbreaking research on moral psychology, he shows how moral judgments arise not from reason but from gut feelings. He shows why liberals, conservatives, and libertarians have such different intuitions about right and wrong, and he shows why each side is actually right about many of its central concerns. In this subtle yet accessible book, Haidt gives you the key to understanding the miracle of human cooperation, as well as the curse of our eternal divisions and conflicts. If you're ready to trade in anger for understanding, read *The Righteous Mind*.

Predisposed: Liberals, Conservatives, and the Biology of Political Differences (2013)
John R. Hibbing and Kevin B. Smith
Summary:

Buried in many people and operating largely outside the realm of conscious thought are forces inclining us toward liberal or conservative political convictions. Our biology predisposes us to see and understand the world in different ways, not always reason and the careful consideration of facts. These predispositions are in turn responsible for a significant portion of the political and ideological conflict that marks human history.

With verve and wit, renowned social scientists John Hibbing, Kevin Smith, and John Alford—pioneers in the field of biopolitics—present overwhelming evidence that people differ politically not just because they grew up in different cultures or were presented with different information. Despite the oft-heard longing for consensus, unity, and peace, the universal rift between conservatives and liberals endures because people have diverse psychological, physiological, and genetic traits. These biological differences influence much of what makes people who they are, including their orientations to politics.

Political disputes typically spring from the assumption that those who do not agree with us are shallow, misguided, uninformed, and ignorant. Predisposed suggests instead that political opponents simply experience, process, and respond to the world differently. It follows, then, that the key to getting along politically is not the ability of one side to persuade the other side to see the error of its ways but rather the ability of each side to see that the other is different, not just politically, but physically. Predisposed will change the way you think about politics and partisan conflict.

As a bonus, the book includes a "Left/Right 20 Questions" game to test whether your predispositions lean liberal or conservative.

The Little Blue Book: The Essential Guide to Thinking and Talking Democratic (2012)
George Lakoff and Elisabeth Wehling (http://en.wikipedia.org/wiki/George_Lakoff, http://linguistics.berkeley.edu/person/156)
Summary:
"The essential handbook for thinking and talking Democratic—must reading not only for every Democrat but for every responsible citizen" (Robert B. Reich, former Secretary of Labor and author of *Beyond Outrage*).

Voters cast their ballots for what they believe is right, for the things that make moral sense. Yet Democrats have too often failed to use language linking their moral values with their policies. The Little Blue Book demonstrates how to make that connection clearly and forcefully, with hands-on advice for discussing the most pressing issues of our time: the economy, health care, women's issues, energy and environmental policy, education, food policy, and more. Dissecting the ways that extreme conservative positions have permeated political discourse, Lakoff and Wehling show how to fight back on moral grounds and in concrete terms. Revelatory, passionate, and deeply practical, The Little Blue Book will forever alter the way Democrats and progressives think and talk about politics.

Yes! 50 Scientifically Proven Ways to Be Persuasive (2009) 258 pgs
Noah J. Goldstein, Steve J. Martin and Robert Cialdini (http://en.wikipedia.org/wiki/Robert_Cialdini, http://www.anderson.ucla.edu/faculty/management-and-organizations/faculty/goldstein, http://www.influenceatwork.co.uk/steve.php,
Summary:
New York Times bestselling introduction of fifty scientifically proven techniques for increasing your persuasive powers in business and life.

Small changes can make a big difference in your powers of persuasion. What one word can you start using today to increase your persuasiveness by more than fifty percent? Which item of stationery can dramatically increase people's responses to your requests? How can you win over your rivals by inconveniencing them? Why does knowing that so many dentists are named Dennis improve your persuasive prowess?

Every day we face the challenge of persuading others to do what we want. But what makes people say yes to our requests? Persuasion is not only an art, it is also a science, and researchers who study it have uncovered a series of hidden rules for moving people in your direction. Based on more than sixty years of research into the psychology of persuasion, *Yes!* reveals fifty simple but remarkably effective strategies that will make you much more persuasive at work and in your personal life, too.

Co-written by the world's most quoted expert on influence, Professor Robert Cialdini, *Yes!* presents dozens of surprising discoveries from the science of persuasion in short, enjoyable, and insightful chapters that you can apply immediately to become a more effective persuader. Why did a sign pointing

out the problem of vandalism in the Petrified Forest National Park actually *increase* the theft of pieces of petrified wood? Why did sales of jam multiply tenfold when consumers were offered many *fewer* flavors? Why did people prefer a Mercedes immediately after giving reasons why they prefer a BMW? What simple message on cards left in hotel rooms greatly increased the number of people who behaved in environmentally friendly ways?

Often counterintuitive, the findings presented in *Yes!* will steer you away from common pitfalls while empowering you with little known but proven wisdom. Whether you are in advertising, marketing, management, on sales, or just curious about how to be more influential in everyday life, *Yes!* shows how making small, scientifically proven changes to your approach can have a dramatic effect on your persuasive powers.

VI. CYBER SOCIETY PERSPECTIVES ON EDUCATION AND BUSINESS

The Future of Work: Robots, AI, and Automation (2018)
Darrell M. West (https://www.brookings.edu/experts/darrell-m-west/)
Summary:

Looking for ways to handle the transition to a digital economy

Robots, artificial intelligence, and driverless cars are no longer things of the distant future. They are with us today and will become increasingly common in coming years, along with virtual reality and digital personal assistants.

As these tools advance deeper into everyday use, they raise the question—how will they transform society, the economy, and politics? If companies need fewer workers due to automation and robotics, what happens to those who once held those jobs and don't have the skills for new jobs? And since many social benefits are delivered through jobs, how are people outside the workforce for a lengthy period of time going to earn a living and get health care and social benefits?

Looking past today's headlines, political scientist and cultural observer Darrell M. West argues that society needs to rethink the concept of jobs, reconfigure the social contract, move toward a system of lifetime learning, and develop a new kind of politics that can deal with economic dislocations. With the U.S. governance system in shambles because of political polarization and hyper-partisanship, dealing creatively with the transition to a fully digital economy will vex political leaders and complicate the adoption of remedies that could ease the transition pain. It is imperative that we make major adjustments in how we think about work and the social contract in order to prevent society from spiraling out of control.

This book presents a number of proposals to help people deal with the transition from an industrial to a digital economy. We must broaden the concept of employment to include volunteering and parenting and pay greater attention to the opportunities for leisure time. New forms of identity will be possible when the "job" no longer defines people's sense of personal meaning, and they engage in a broader range of activities. Workers will need help throughout their lifetimes to acquire new skills and develop new job capabilities. Political reforms will be necessary to reduce polarization and restore civility so there can be open and healthy debate about where responsibility lies for economic well-being.

This book is an important contribution to a discussion about tomorrow—one that needs to take place today.

The Industries of the Future (2017)
Alec Ross (https://en.wikipedia.org/wiki/Alec_Ross_(author))
Summary:

The New York Times bestseller, from leading innovation expert Alec Ross, a "fascinating vision" (Forbes) of what's next for the world and how to navigate the changes the future will bring.

While Alec Ross was working as Senior Advisor for Innovation to the Secretary of State, he traveled to forty-one countries, exploring the latest advances coming out of every continent. From startup hubs in Kenya to R&D labs in South Korea, Ross has seen what the future holds.

In The Industries of the Future, Ross provides a "lucid and informed guide" (Financial Times) to the changes coming in the next ten years. He examines the fields that will most shape our economic future, including robotics and artificial intelligence, cybercrime and cybersecurity, the commercialization of genomics, the next step for big data, and the impact of digital technology on money and markets. In each of these realms, Ross addresses the toughest questions: How will we have to adapt to the changing nature of work? Is the prospect of cyberwar sparking the next arms race? How can the world's rising nations hope to match Silicon Valley with their own innovation hotspots? And what can today's parents do to prepare their children for tomorrow?

Ross blends storytelling and economic analysis to show how sweeping global trends are affecting the ways we live. Sharing insights from global leaders—from the founders of Google and Twitter to defense experts like David Petraeus—Ross reveals the technologies and industries that will drive the next stage of globalization. The Industries of the Future is "a riveting and mind-bending book" (New York Journal of Books), a "must read" (Wendy Kopp, Founder of Teach for America) regardless of "whether you follow these fields closely or you still think of Honda as a car rather than a robotics company" (Forbes).

Big Data in Practice: How 45 Successful Companies Used Big Data Analytics to Deliver Extraordinary Results (2016)
Bernard Marr (https://www.amazon.com/Bernard-Marr/e/B001H6KUSS)

The best-selling author of Big Data is back, this time with a unique and in-depth insight into how specific companies use big data.

Big data is on the tip of everyone's tongue. Everyone understands its power and importance, but many fail to grasp the actionable steps and resources required to utilise it effectively. This book fills the knowledge gap by showing how major companies are using big data every day, from an up-close, on-the-ground perspective.

From technology, media and retail, to sport teams, government agencies and financial institutions, learn the actual strategies and processes being used to learn about customers, improve manufacturing, spur innovation, improve safety and so much more. Organized for easy dip-in navigation, each chapter follows the same structure to give you the information you need quickly. For each company profiled, learn what data was used, what problem it solved and the processes put it place to make it practical, as well as the technical details, challenges and lessons learned from each unique scenario.

Learn how predictive analytics helps Amazon, Target, John Deere and Apple understand their customers. Discover how big data is behind the success of Walmart, LinkedIn, Microsoft and more. Learn how big data is changing medicine, law enforcement, hospitality, fashion, science and banking

Rise of the Robots: Technology and the Threat of a Jobless Future (2015)
Martin Ford (https://en.wikipedia.org/wiki/Martin_Ford_(author))
Summary:

What are the jobs of the future? How many will there be? And who will have them? As technology continues to accelerate and machines begin taking care of themselves, fewer people will be necessary. Artificial intelligence is already well on its way to making "good jobs" obsolete: many paralegals, journalists, office workers, and even computer programmers are poised to be replaced by robots and smart software. As progress continues, blue and white collar jobs alike will evaporate, squeezing working- and middle-class families ever further. At the same time, households are under assault from exploding costs, especially from the two major industries-education and health care-that, so far, have not been transformed by information technology. The result could well be massive unemployment and inequality as well as the implosion of the consumer economy itself.

The past solutions to technological disruption, especially more training and education, aren't going to work. We must decide, now, whether the future will see broad-based prosperity or catastrophic levels of

inequality and economic insecurity. Rise of the Robots is essential reading to understand what accelerating technology means for our economic prospects-not to mention those of our children-as well as for society as a whole.

New York Times Bestseller, Top Business Book of 2015 at Forbes, One of NBCNews.com 12 Notable Science and Technology Books of 2015

Big Data, Little Data, No Data (2015)
Christine L. Borgman (http://christineborgman.info/)
Summary:
"Big Data" is on the covers of Science, Nature, the Economist, and Wired magazines, on the front pages of the Wall Street Journal and the New York Times. But despite the media hyperbole, as Christine Borgman points out in this examination of data and scholarly research, having the right data is usually better than having more data; little data can be just as valuable as big data. In many cases, there are no data -- because relevant data don't exist, cannot be found, or are not available. Moreover, data sharing is difficult, incentives to do so are minimal, and data practices vary widely across disciplines. Borgman, an often-cited authority on scholarly communication, argues that data have no value or meaning in isolation; they exist within a knowledge infrastructure -- an ecology of people, practices, technologies, institutions, material objects, and relationships. After laying out the premises of her investigation -- six "provocations" meant to inspire discussion about the uses of data in scholarship -- Borgman offers case studies of data practices in the sciences, the social sciences, and the humanities, and then considers the implications of her findings for scholarly practice and research policy. To manage and exploit data over the long term, Borgman argues, requires massive investment in knowledge infrastructures; at stake is the future of scholarship.

Big Data: A Revolution That Will Transform How We Live, Work, and Think (2014)
Viktor Mayer-Schönberger (http://www.keble.ox.ac.uk/academics/about/prof-viktor-mayer-schonberger) & Kenneth Cukier (http://www.cukier.com/ or http://mediadirectory.economist.com/people/kenneth-cukier/
Summary:
A revelatory exploration of the hottest trend in technology and the dramatic impact it will have on the economy, science, and society at large.
Which paint color is most likely to tell you that a used car is in good shape? How can officials identify the most dangerous New York City manholes before they explode? And how did Google searches predict the spread of the H1N1 flu outbreak?
The key to answering these questions, and many more, is big data. "Big data" refers to our burgeoning ability to crunch vast collections of information, analyze it instantly, and draw sometimes profoundly surprising conclusions from it. This emerging science can translate myriad phenomena—from the price of airline tickets to the text of millions of books—into searchable form, and uses our increasing computing power to unearth epiphanies that we never could have seen before. A revolution on par with the Internet or perhaps even the printing press, big data will change the way we think about business, health, politics, education, and innovation in the years to come. It also poses fresh threats, from the inevitable end of privacy as we know it to the prospect of being penalized for things we haven't even done yet, based on big data's ability to predict our future behavior.
In this brilliantly clear, often surprising work, two leading experts explain what big data is, how it will change our lives, and what we can do to protect ourselves from its hazards. Big Data is the first big book about the next big thing.

The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies (2014)
Erik Brynjolfsson (http://mitsloan.mit.edu/faculty-and-research/faculty-directory/detail/?id=22672)
Summary:

A New York Times Bestseller. A "fascinating" (Thomas L. Friedman, New York Times) look at how digital technology is transforming our work and our lives.

In recent years, Google's autonomous cars have logged thousands of miles on American highways and IBM's Watson trounced the best human Jeopardy! players. Digital technologies—with hardware, software, and networks at their core—will in the near future diagnose diseases more accurately than doctors can, apply enormous data sets to transform retailing, and accomplish many tasks once considered uniquely human.

In The Second Machine Age MIT's Erik Brynjolfsson and Andrew McAfee—two thinkers at the forefront of their field—reveal the forces driving the reinvention of our lives and our economy. As the full impact of digital technologies is felt, we will realize immense bounty in the form of dazzling personal technology, advanced infrastructure, and near-boundless access to the cultural items that enrich our lives.

Amid this bounty will also be wrenching change. Professions of all kinds—from lawyers to truck drivers—will be forever upended. Companies will be forced to transform or die. Recent economic indicators reflect this shift: fewer people are working, and wages are falling even as productivity and profits soar.

Drawing on years of research and up-to-the-minute trends, Brynjolfsson and McAfee identify the best strategies for survival and offer a new path to prosperity. These include revamping education so that it prepares people for the next economy instead of the last one, designing new collaborations that pair brute processing power with human ingenuity, and embracing policies that make sense in a radically transformed landscape.

A fundamentally optimistic book, The Second Machine Age alters how we think about issues of technological, societal, and economic progress.

Who Owns the Future? (2014)
Jaron Lanier (http://en.wikipedia.org/wiki/Jaron_Lanier)
Summary:

Jaron Lanier is the father of virtual reality and one of the world's most brilliant thinkers. *Who Owns the Future?* is his visionary reckoning with the most urgent economic and social trend of our age: the poisonous concentration of money and power in our digital networks.

Lanier has predicted how technology will transform our humanity for decades, and his insight has never been more urgently needed. He shows how Siren Servers, which exploit big data and the free sharing of information, led our economy into recession, imperiled personal privacy, and hollowed out the middle class. The networks that define our world—including social media, financial institutions, and intelligence agencies—now threaten to destroy it.

But there is an alternative. In this provocative, poetic, and deeply humane book, Lanier charts a path toward a brighter future: an information economy that rewards ordinary people for what they do and share on the web.

Open: How We'll Work, Live and Learn in the Future (2013)
David A. Price (http://www.pixartouchbook.com/about/)
Summary:

What makes a global corporation give away its prized intellectual property? Why are Ivy League universities allowing anyone to take their courses for free? What drives a farmer in rural Africa to share his secrets with his competitors?

A collection of hactivists, hobbyists, forum-users and maverick leaders are leading a quiet but unstoppable revolution. They are sharing everything they know, and turning knowledge into action in ways that were unimaginable even a decade ago. Driven by technology, and shaped by common values, going 'open' has transformed the way we live. It's not so much a question of if our workplaces, schools and colleges go open, but when.

Packed with illustration and advice, this entertaining read by learning futurist, David Price, argues that 'open' is not only affecting how we are choosing to live, but that it's going to be the difference

between success and failure in the future.

One World Schoolhouse (2013) 259 pgs
Salman Khan (http://en.wikipedia.org/wiki/Salman_Khan_%28educator%29)
Summary:

A free, world-class education for anyone, anywhere: this is the goal of the Khan Academy, a passion project that grew from an ex-engineer and hedge funder's online tutoring sessions with his niece, who was struggling with algebra, into a worldwide phenomenon. Today millions of students, parents, and teachers use the Khan Academy's free videos and software, which have expanded to encompass nearly every conceivable subject; and Academy techniques are being employed with exciting results in a growing number of classrooms around the globe.

Like many innovators, Khan rethinks existing assumptions and imagines what education could be if freed from them. And his core idea-liberating teachers from lecturing and state-mandated calendars and opening up class time for truly human interaction-has become his life's passion. Schools seek his advice about connecting to students in a digital age, and people of all ages and backgrounds flock to the site to utilize this fresh approach to learning.

In THE ONE WORLD SCHOOLHOUSE, Khan presents his radical vision for the future of education, as well as his own remarkable story, for the first time. In these pages, you will discover, among other things:

- How both students and teachers are being bound by a broken top-down model invented in Prussia two centuries ago
- Why technology will make classrooms more human and teachers more important
- How and why we can afford to pay educators the same as other professionals
- How we can bring creativity and true human interactivity back to learning
- Why we should be very optimistic about the future of learning.

Parents and politicians routinely bemoan the state of our education system. Statistics suggest we've fallen behind the rest of the world in literacy, math, and sciences. With a shrewd reading of history, Khan explains how this crisis presented itself, and why a return to "mastery learning," abandoned in the twentieth century and ingeniously revived by tools like the Khan Academy, could offer the best opportunity to level the playing field, and to give all of our children a world-class education now.

More than just a solution, THE ONE WORLD SCHOOLHOUSE serves as a call for free, universal, global education, and an explanation of how Khan's simple yet revolutionary thinking can help achieve this inspiring goal.

Alone Together: Why We Expect More from Technology and Less from Each Other (2012) 360 pgs
Sherry Turkle (http://www.mit.edu/~sturkle/)
Summary:

Technology has become the architect of our intimacies. Online, we fall prey to the illusion of companionship, gathering thousands of Twitter and Facebook friends and confusing tweets and wall posts with authentic communication. But, as MIT technology and society specialist Sherry Turkle argues, this relentless connection leads to a new solitude. As technology ramps up, our emotional lives ramp down.

Alone Together is the result of Turkle's nearly fifteen-year exploration of our lives on the digital terrain. Based on hundreds of interviews, it describes new unsettling relationships between friends, lovers, parents, and children, and new instabilities in how we understand privacy and community, intimacy, and solitude.

Now You See It: How Technology and Brain Science Will Transform Schools and Business for the 21st Century (2012)
Cathy N. Davidson (http://www.cathydavidson.com/about/)
Summary:

"As scholarly as [it] is . . . this book about education happens to double as an optimistic, even thrilling, summer read." —*The New York Times*

A brilliant combination of science and its real-world application, *Now You See It* sheds light on one of the greatest problems of our historical moment: our schools and businesses are designed for the last century, not for a world in which technology has reshaped the way we think and learn. In this informed and optimistic work, Cathy N. Davidson takes us on a tour of the future of work and education, introducing us to visionaries whose groundbreaking ideas will soon affect every arena of our lives, from schools with curriculums built around video games to workplaces that use virtual environments to train employees.

The Shallows: What the Internet is Doing to Our Brains (2011) 280 pgs
Nicholas G. Carr (http://en.wikipedia.org/wiki/Nicholas_G._Carr)

Summary:

Finalist for the 2011 Pulitzer Prize in General Nonfiction: "Nicholas Carr has written a *Silent Spring* for the literary mind."—Michael Agger, *Slate*

"Is Google making us stupid?" When Nicholas Carr posed that question, in a celebrated *Atlantic Monthly* cover story, he tapped into a well of anxiety about how the Internet is changing us. He also crystallized one of the most important debates of our time: As we enjoy the Net's bounties, are we sacrificing our ability to read and think deeply?

Now, Carr expands his argument into the most compelling exploration of the Internet's intellectual and cultural consequences yet published. As he describes how human thought has been shaped through the centuries by "tools of the mind"—from the alphabet to maps, to the printing press, the clock, and the computer—Carr interweaves a fascinating account of recent discoveries in neuroscience by such pioneers as Michael Merzenich and Eric Kandel. Our brains, the historical and scientific evidence reveals, change in response to our experiences. The technologies we use to find, store, and share information can literally reroute our neural pathways.

Building on the insights of thinkers from Plato to McLuhan, Carr makes a convincing case that every information technology carries an intellectual ethic—a set of assumptions about the nature of knowledge and intelligence. He explains how the printed book served to focus our attention, promoting deep and creative thought. In stark contrast, the Internet encourages the rapid, distracted sampling of small bits of information from many sources. Its ethic is that of the industrialist, an ethic of speed and efficiency, of optimized production and consumption—and now the Net is remaking us in its own image. We are becoming ever more adept at scanning and skimming, but what we are losing is our capacity for concentration, contemplation, and reflection.

Part intellectual history, part popular science, and part cultural criticism, *The Shallows* sparkles with memorable vignettes—Friedrich Nietzsche wrestling with a typewriter, Sigmund Freud dissecting the brains of sea creatures, Nathaniel Hawthorne contemplating the thunderous approach of a steam locomotive—even as it plumbs profound questions about the state of our modern psyche. This is a book that will forever alter the way we think about media and our minds.

How Learning Works: Seven Research-Based Principles for Smart Teaching (2010)
Susan A. Ambrose and Michael W. Bridges

Summary:

"How Learning Works is the perfect title for this excellent book. Drawing upon new research in psychology, education, and cognitive science, the authors have demystified a complex topic into clear explanations of seven powerful learning principles. Full of great ideas and practical suggestions, all based on solid research evidence, this book is essential reading for instructors at all levels who wish to improve their students' learning."

—Barbara Gross Davis, assistant vice chancellor for educational development, University of California, Berkeley, and author, Tools for Teaching

"This book is a must-read for every instructor, new or experienced. Although I have been teaching for almost thirty years, as I read this book I found myself resonating with many of its ideas, and I discovered new ways of thinking about teaching."

—Eugenia T. Paulus, professor of chemistry, North Hennepin Community College, and 2008 U.S. Community Colleges Professor of the Year from The Carnegie Foundation for the Advancement of Teaching and the Council for Advancement and Support of Education

"Thank you Carnegie Mellon for making accessible what has previously been inaccessible to those of us who are not learning scientists. Your focus on the essence of learning combined with concrete examples of the daily challenges of teaching and clear tactical strategies for faculty to consider is a welcome work. I will recommend this book to all my colleagues."

—Catherine M. Casserly, senior partner, The Carnegie Foundation for the Advancement of Teaching

"As you read about each of the seven basic learning principles in this book, you will find advice that is grounded in learning theory, based on research evidence, relevant to college teaching, and easy to understand. The authors have extensive knowledge and experience in applying the science of learning to college teaching, and they graciously share it with you in this organized and readable book."

—From the Foreword by Richard E. Mayer, professor of psychology, University of California, Santa Barbara; coauthor, e-Learning and the Science of Instruction; and author, Multimedia Learning

VII. PROJECT TEAMWORK

Leading Project Teams: The Basics of Project Management and Team Leadership (2011)
Anthony T. Cobb (http://www.management.pamplin.vt.edu/directory/cobb-profile.html)
Summary:

This practical book provides entry-level project tools and skills for newcomers to project management. It helps student teams become more effective at doing course projects by learning and applying project management tools and techniques. It also provides invaluable skills that students can utilize when they enter the workplace. Chapters focusing on project initiation and planning are followed by coverage of the human resource issues involved in project leadership and how to write up project reports. Appendices introduce the use of earned value analysis and show how critical paths are calculated.

Teamwork and Teamplay (2010)
James Cain and Barry Jolliff (http://www.teamworkandteamplay.com/, https://www.linkedin.com/pub/barry-jolliff/b/247/736)
Summary:

Possibly a key choice for those looking for an experiential-adventure type resource book. This book is well-laid out and clearly written with many visual aids. In addition, the authors focus a great deal on assisting the reader in identifying and locating the resources and tools necessary for each activity and initiative that they describe. The book features a whole range of teamwork and teambuilding activities from the short and the simple (and possible to run with little propos or resources) to the longer, more complicated activities which clearly need more time, resources and planning to get the most from them.

Building Team Power: How to Unleash the Collaborative Genius of Teams for Increased Engagement, Productivity, and Results (2010)
Thomas Kayser (http://www.amazon.com/Building-Team-Power-Collaborative-Productivity/dp/0071746749)
Summary:

Building Team Power is a hands-on, how-to book. It is a roll-up-your-sleeves-and-get-your-hands-dirty book. It is applications oriented all the way. Don't look for complex psychological, sociological or academic group theory models here. You won't find any. This book digs into the crucial behaviors you need to understand and practice to be a collaborative leader. It takes you into the "how-tos" for building

collaborative partnerships and facilitating teamwork within your own work group, across work groups, or in task forces, committees, problem-solving teams, executive councils, and the like. It is one thing to say, "We need more and better collaboration around here;" it is another thing to do it. This book fills a void because it shows you how to do it in terms you can understand, with skills you can actually put into practice!

Virtual Team Success: A Practical Guide for Working and Leading from a Distance (2010)
Richard Lepsinger and Darleen DeRosa (https://www.linkedin.com/in/ricklepsinger, http://www.amazon.com/Virtual-Team-Success-Practical-Distance/dp/0470532963)
Summary:
This book leverages robust research studies and provides a practical resource for virtual team members and leaders. Based on a research study which is one of the most comprehensive studies ever conducted on virtual teams, this book offers a wealth of solid recommendations. To help organizations and leaders enhance virtual team performance, the book includes information on: key challenges, factors for success, characteristics of effective virtual teams, a model for success, effective practices, enhancing performance of low performing teams. The book also includes sections on future challenges and issues.

Extraordinary Groups: How Ordinary Teams Achieve Amazing Results (2009)
Geoffrey M. Bellman and Kathleen D. Ryan (https://www.linkedin.com/in/geoffbellman, http://www.amazon.com/Kathleen-D.-Ryan/e/B002VYDUWI)
Summary:
Two leading experts present a new approach to help teams nurture extraordinary experiences and excel. Bellman and Ryan argue that an extraordinary group emerges when a group experience satisfies two or more core needs that members intuitively bring to any group they join. Based on extensive research, the book presents the Group Needs Model to help anyone nurture extraordinary experiences in their groups and achieve outstanding results. This book is written for anyone who leads groups including HR and OD professionals, managers, executives, nonprofit managers and directors, virtual teams leaders, and trainers.

Team-Based Learning: A Transformative Use of Small Groups in College Teaching (2004)
Larry K. Michaelsen (http://www.teambasedlearning.org/larry-michaelsen/)
Summary:
This book describes team-based learning (TBL), an unusually powerful and versatile teaching strategy that enables teachers to take small group learning to a whole new level of effectiveness. It is the only pedagogical use of small groups that is based on a recognition of the critical difference between "groups" and "teams", and intentionally employs specific procedures to transform newly-formed groups into high performance learning teams.
This book is a complete guide to implementing TBL in a way that will promote the deep learning all teachers strive for. This is a teaching strategy that promotes critical thinking, collaboration, mastery of discipline knowledge, and the ability to apply it.
Part I covers the basics, beginning with an analysis of the relative merits and limitations of small groups and teams. It then sets out the processes, with much practical advice, for transforming small groups into cohesive teams, for creating effective assignments and thinking through the implications of team-based learning.
In Part II teachers from disciplines as varied as accounting, biology, business, ecology, chemistry, health education and law describe their use of team-based learning. They also demonstrate how this teaching strategy can be applied equally effectively in environments such as large classes, mixed traditional and on-line classes, and with highly diverse student populations.
Part III offers a synopsis of the major lessons to be learned from the experiences of the teachers who have used TBL, as described in Part II. For teachers contemplating the use of TBL, this section provides

answers to key questions, e.g., whether to use team-based learning, what it takes to make it work effectively, and what benefits one can expect from it–for the teacher as well as for the learners. The appendices answer frequently asked questions, include useful forms and exercises, and offer advice on peer evaluations and grading. A related Web site that allows readers to "continue the conversation," view video material, access indexed descriptions of applications in various disciplines and post questions further enriches the book. The editors' claim that team-based instruction can transform the quality of student learning is fully supported by the empirical evidence and examples they present. An important book for all teachers in higher education.

The Five Dysfuntions of a Team (2002) 229 pgs
Patrick Lencioni (http://www.tablegroup.com/pat/)
Summary:

In *The Five Dysfunctions of a Team* Patrick Lencioni once again offers a leadership fable that is as enthralling and instructive as his first two best-selling books, *The Five Temptations of a CEO* and *The Four Obsessions of an Extraordinary Executive*. This time, he turns his keen intellect and storytelling power to the fascinating, complex world of teams.

Kathryn Petersen, Decision Tech's CEO, faces the ultimate leadership crisis: Uniting a team in such disarray that it threatens to bring down the entire company. Will she succeed? Will she be fired? Will the company fail? Lencioni's utterly gripping tale serves as a timeless reminder that leadership requires as much courage as it does insight.

Throughout the story, Lencioni reveals the five dysfunctions which go to the very heart of why teams even the best ones-often struggle. He outlines a powerful model and actionable steps that can be used to overcome these common hurdles and build a cohesive, effective team. Just as with his other books, Lencioni has written a compelling fable with a powerful yet deceptively simple message for all those who strive to be exceptional team leaders.

Quiet: The Power of Introverts in a World That Can't Stop Talking (2013)
Susan Cain (http://en.wikipedia.org/wiki/Susan_Cain, http://www.ted.com/talks/susan_cain_the_power_of_introverts?language=en)
Summary:

At least one-third of the people we know are introverts. They are the ones who prefer listening to speaking; who innovate and create but dislike self-promotion; who favor working on their own over working in teams. It is to introverts—Rosa Parks, Chopin, Dr. Seuss, Steve Wozniak—that we owe many of the great contributions to society. In *Quiet*, Susan Cain argues that we dramatically undervalue introverts and shows how much we lose in doing so. She charts the rise of the Extrovert Ideal throughout the twentieth century and explores how deeply it has come to permeate our culture. She also introduces us to successful introverts—from a witty, high-octane public speaker who recharges in solitude after his talks, to a record-breaking salesman who quietly taps into the power of questions. Passionately argued, superbly researched, and filled with indelible stories of real people, *Quiet* has the power to permanently change how we see introverts and, equally important, how they see themselves.

VIII. COLLABORATION

Collaborative Learning Techniques: A Handbook for College Faculty (2014)
Elizabeth F. Barkley and Claire Howell Major (https://www.kendallhunt.com/Author.aspx?id=34486, http://education.ua.edu/people/claire-major/)
Summary:

A guide to thirty-five creative assignments for pairs and groups. *Collaborative Learning Techniques* is the bestseller that college and university faculty around the world have used to help them make the most of small group learning.

A mountain of evidence shows that students who learn in small groups together exhibit higher academic achievement, motivation, and satisfaction than those who don't. Collaborative learning puts into practice the major conclusion from learning theory: that students must be actively engaged in building their own minds. In this book, the authors synthesize the relevant research and theory to support thirty-five collaborative learning activities for use in both traditional and online classrooms.

This second edition reflects the changed world of higher education. New technologies have opened up endless possibilities for college teaching, but it's not always easy to use these technologies effectively. Updated to address the challenges of today's new teaching environments, including online, "flipped," and large lectures, *Collaborative Learning Techniques* is a wonderful reference for educators who want to make the most of any course environment. This revised and expanded edition includes:

- Additional techniques, with an all-new chapter on using games to provide exciting, current, technologically-sophisticated curricula
- A section on effective online implementation for each of the thirty-five techniques
- Significantly expanded pedagogical rationale and updates on the latest research showing how and why collaborative learning works
- Examples for implementing collaborative learning techniques in a variety of learning environments, including large lecture classes and "flipped" classes
- Expanded guidance on how to solve common problems associated with group work

The authors guide instructors through all aspects of group work, providing a solid grounding in what to do, how to do it, and why it is important for student learning. The detailed procedures in *Collaborative Learning Techniques* will help teachers make sure group activities go smoothly, no matter the size or delivery method of their classes. With practical advice on how to form student groups, assign roles, build team spirit, address unexpected problems, and evaluate and grade student participation, this new edition of the international classic makes incorporating effective group work easy.

Harvard Business Review's 10 Must Reads on Collaboration (2013)
Harvard Business Review, Daniel Goleman, Richard E. Boyatzis & Morten Hansen
(http://www.danielgoleman.info/biography/)
Summary:

If you read nothing else on collaborating effectively, read these 10 articles. We've combed through hundreds of articles in the Harvard Business Review archive and selected the most important ones to help you work more productively with people on your team, in other departments, and in other organizations.

Leading experts such as Daniel Goleman, Herminia Ibarra, and Morten Hansen provide the insights and advice you need to:
• Forge strong relationships up, down, and across the organization
• Build a collaborative culture
• Bust silos
• Harness informal knowledge sharing
• Pick the right type of collaboration for your business
• Manage conflict wisely
• Know when not to collaborate

Designing Together: The Collaboration and Conflict Management Handbook for Creative Professionals (2013)
Daniel M. Brown (http://eightshapes.com/aboutus/dan-brown/)
Summary:

What is the one thing not taught in design school, but is an essential survival skill for practicing designers? Working with other people. And yet, in every project, collaboration with other people is often the most difficult part.

The increasing complexity of design projects, the greater reliance on remote team members, and the evolution of design techniques demands professionals who can cooperate effectively. *Designing Together* is a book for cultivating collaborative behaviors and dealing with the inevitable difficult conversations.

Designing Together features:
- 28 collaboration techniques
- 46 conflict management techniques
- 31 difficult situation diagnoses
- 17 designer personality traits

This book is for designers:
- On teams large or small
- Co-located, remote, or both
- Working in multidisciplinary groups
- Within an organization or consulting from outside

You'll also find sidebar contributions from David Belman (Threespot), Mandy Brown (Editorially, A Book Apart), Erika Hall (Mule Design Studio), Denise Jacobs (author), Jonathan Knoll (InfinityPlusOne), Marc Rettig (Fit Associates), and Jeanine Turner (Georgetown University).

Creative Conspiracy: The New Rules of Breakthrough Collaboration (2013)
Leigh Thompson (http://www.leighthompson.com/index.php/about/biography)
Summary:

Think of your to-do list at work. Chances are the most important tasks require you to work with others—and the success of those endeavors depends on the effectiveness of your collaboration.

According to management expert Leigh Thompson, collaboration that is conscious, planned, and focused on generating new ideas builds excitement and produces what she calls a "creative conspiracy." Teams that conspire to organize themselves, motivate one another, and combine their talents to meet creative challenges are the hallmark of the most successful organizations.

In this book, Thompson reveals the keys to the kind of collaboration that allows teams to reach their full creative potential and maximize their results. She also reveals a host of surprising findings; for example:

- Left to their own devices, teams are less creative than individuals
- Providing "rules" to teams actually increases inventiveness
- Striving for quality results in less creativity than striving for quantity
- Fluctuating membership enhances a team's innovation
- Most leaders cannot articulate the four basic rules of brainstorming

Thompson combines broad-ranging research with real-life examples to offer strategies and practices designed to help teams and their leaders capitalize on what actually works when it comes to creative collaboration. Creative Conspiracy challenges managers to adopt an unconventional approach to leading teams that, done right, will lead to the creative success of every team—and every organization.

Make Space: How to Set the Stage for Creative Collaboration (2012)
Scott Doorley, Scott Witthoft, and Hasso Plattner Institute of Design at Stanford University (http://dschool.stanford.edu/)

"If you are determined to encourage creativity and provide a collaborative environment that will bring out the best in people, you will want this book by your side at all times." --Bill Moggridge, Director of the Smithsonian's Cooper-Hewitt National Design Museum

"Make Space is an articulate account about the importance of space; how we think about it, build it and thrive in it." --James P. Hackett, President and CEO, Steelcase

An inspiring guidebook filled with ways to alter space to fuel creative work and foster collaboration. Based on the work at the Stanford University d.school and its Environments Collaborative Initiative, Make Space is a tool that shows how space can be intentionally manipulated to ignite creativity.

Appropriate for designers charged with creating new spaces or anyone interested in revamping an existing space, this guide offers novel and non-obvious strategies for changing surroundings specifically to enhance the ways in which teams and individuals communicate, work, play--and innovate.

Inside are:

- Tools--tips on how to build everything from furniture, to wall treatments, and rigging
- Situations--scenarios, and layouts for sparking creative activities
- Insights--bite-sized lessons designed to shortcut your learning curve
- Space Studies--candid stories with lessons on creating spaces for making, learning, imagining, and connecting
- Design Template--a framework for understanding, planning, and building collaborative environments

Make Space is a new and dynamic resource for activating creativity, communication and innovation across institutions, corporations, teams, and schools alike. Filled with tips and instructions that can be approached from a wide variety of angles, Make Space is a ready resource for empowering anyone to take control of an environment.

IX. DESIGN

The Design of Everyday Things (2013) 257 pgs
Donald Norman (http://www.jnd.org/about.html)
Summary:

Even the smartest among us can feel inept as we fail to figure out which light switch or oven burner to turn on, or whether to push, pull, or slide a door. The fault, argues this ingenious—even liberating—book, lies not in ourselves, but in product design that ignores the needs of users and the principles of cognitive psychology. The problems range from ambiguous and hidden controls to arbitrary relationships between controls and functions, coupled with a lack of feedback or other assistance and unreasonable demands on memorization. *The Design of Everyday Things* shows that good, usable design is possible. The rules are simple: make things visible, exploit natural relationships that couple function and control, and make intelligent use of constraints. The goal: guide the user effortlessly to the right action on the right control at the right time.

In this entertaining and insightful analysis, cognitive scientist Don Norman hails excellence of design as the most important key to regaining the competitive edge in influencing consumer behavior. Now fully expanded and updated, with a new introduction by the author, *The Design of Everyday Things* is a powerful primer on how—and why—some products satisfy customers while others only frustrate them.

Mobile Usability (2012)
Jakob Nielsen and Raluca Budiu (http://www.nngroup.com/articles/author/jakob-nielsen/, http://www.nngroup.com/articles/author/raluca-budiu/)
Summary:

How do we create a satisfactory user experience when limited to a small device? This new guide focuses on usability for mobile devices, primarily smartphones and touchphones, and covers such topics as developing a mobile strategy, designing for small screens, writing for mobile, usability comparisons, and looking toward the future. The book includes 228-full color illustrations to demonstrate the points. Based on expert reviews and international studies with participants ranging from students to early technology adopters and business people using websites on a variety of mobile devices, this guide offers a complete look at the landscape for a mobile world.

Author Jakob Nielsen is considered one of the world's leading experts on Web usability. He is the author of numerous best-selling books, including Prioritizing Web Usability and the groundbreaking Designing Web Usability, which has sold more than 250,000 copies and has been translated in 22 languages.

Observing the User Experience: A Practitioner's Guide to User Research (2ᵈ Ed) (2012) 560 pgs
Elizabeth Goodman and Mike Kuniavsky
(http://www.ischool.berkeley.edu/newsandevents/news/20120921observingtheuserexperience,
https://www.linkedin.com/in/mikek)
Summary:

The gap between who designers and developers imagine their users are, and who those users really are can be the biggest problem with product development. *Observing the User Experience* will help you bridge that gap to understand what your users want and need from your product, and whether they'll be able to use what you've created.

Filled with real-world experience and a wealth of practical information, this book presents a complete toolbox of techniques to help designers and developers see through the eyes of their users. It provides in-depth coverage of 13 user experience research techniques that will provide a basis for developing better products, whether they're Web, software or mobile based. In addition, it's written with an understanding of product development in the real world, taking tight budgets, short schedules, and existing processes into account.

Since the publication of the first edition, the business of user research has exploded with new technologies and new techniques. This second edition takes those changes into account with extensive revisions to existing topics. It also adds entirely new material on observational research, mobile usability, diary studies, remote research, and cross-cultural and multilingual projects.

Product Design and Development, 5ᵗʰ Edition (2011) 289 pgs
Kent Ulrich and Steven Eppinger (http://www.ktulrich.com/,
http://en.wikipedia.org/wiki/Steven_D._Eppinger)
Summary:

Treating such contemporary design and development issues as identifying customer needs, design for manufacturing, prototyping, and industrial design, Product Design and Development by Ulrich and Eppinger presents in a clear and detailed way a set of product development techniques aimed at bringing together the marketing, design, and manufacturing functions of the enterprise. The integrative methods in the book facilitate problem solving and decision making among people with different disciplinary perspectives, reflecting the current industry toward designing and developing products in cross-functional teams.

Physical Computing: Sensing and Controlling the Physical World with Computers (2004) 464 pgs
Dan O'Sullivan and Tom Igoe (http://itp.tisch.nyu.edu/object/OsullivanD.html,
http://www.digi.com/blog/community/tom-igoe/)
Summary:

Physical computing is all around us-from interactive displays at museums to "puff sensors" that aid the physically challenged. With a multiple book buying audience, this book doesn't require a specific background or technical experience. It is designed to help make a more interesting connection between the physical world and the computer world. The audience size is comparable to that of the Robot builder market. In addition to this audience, physical computing is also taught at several universities across the US. This book is a great source of information and knowledge for anyone interested in bridging the gap between the physical and the virtual.