Normal Accidents Living With High Risk Technologies Princeton Paperbacks

NAMED A BEST BOOK OF 2018 BY THE FINANCIAL TIMES A groundbreaking take on how complexity causes failure in all kinds of modern systems--from social media to air travel--this practical and entertaining book reveals how we can prevent meltdowns in business and life "Endlessly fascinating, brimming with insight, and more fun than a book about failure has any right to be, Meltdown will transform how you think about the systems that govern our lives. This is a wonderful book."--Charles Duhigg, author of The Power of Habit and Smarter Faster Better A crash on the Washington, D.C. metro system. An accidental overdose in a state-of-the-art hospital. An overcooked holiday meal. Surprising new research shows that all these events--and the myriad failures that dominate headlines every day--share similar causes. By understanding what lies behind these failures, we can design better systems, make our teams more productive, and transform how we make decisions at work and at home. Weaving together cutting-edge social science with riveting stories that take us from the frontlines of the Volkswagen scandal to backstage at the Oscars, and from deep beneath the Gulf of Mexico to the top of Mount Everest, Chris Clearfield and András Tilesik explain how the increasing complexity of our systems creates conditions ripe for failure and why our brains and teams can't keep up--with an emphasis on practical solutions. It's an eye-opening, empowering, and entirely original book--one that will change the way you see our complex world and your own place in it.

What does the collapse of sub-prime lending have in common with a broken jackscrew in an airliner's tailplane? Or the oil spill disaster in the Gulf of Mexico with the burn-up of Space Shuttle Columbia? These were systems that drifted into failure. While pursuing success in a dynamic, complex environment with limited resources and multiple goal conflicts, a succession of small, everyday decisions eventually produced breakdowns on a massive scale. We have trouble grasping the complexity and normality that gives rise to such large events. We hunt for broken parts, fixable properties, people we can hold accountable. Our analyses of complex system breakdowns remain depressingly linear, depressingly componential - imprisoned in the space of ideas once defined by Newton and Descartes. The growth of complexity in society has outpaced our understanding of how complex systems work and fail. Our technologies have gotten ahead of our theories. We are able to build things - deep-sea oil rigs, jackscrews, collateralized debt obligations - whose properties we understand in isolation. But in competitive, regulated societies, their connections proliferate, their interactions and interdependencies multiply, their complexities mushroom. This book explores complexity theory and systems thinking to understand better how complex systems drift into failure. It studies sensitive dependence on initial conditions, unruly technology, tipping points, diversity - and finds that failure emerges opportunistically, non-randomly, from the very webs of relationships that breed success and that are supposed to protect organizations from disaster. It develops a vocabulary that allows us to harness complexity and find new ways of managing drift.

Outlines how government and private organizations have inadequately addressed the AIDS issue because of the attitude of society toward the population groups most affected by the disease

NEW YORK TIMES BESTSELLER The complete, uncensored history of the award-winning The Daily Show with Jon Stewart, as told by its correspondents, writers, and host. For almost seventeen years, The Daily Show with Jon Stewart brilliantly redefined the borders between television comedy, political satire, and opinionated news coverage. It launched the careers of some of today's most significant comedians, highlighted the hypocrisies of the powerful, and garnered 23 Emmys. Now the show's behind-the-scenes gags, controversies, and camaraderie will be chronicled by the players themselves, from legendary host Jon Stewart to the star cast members and writers-including Samantha Bee, Stephen Colbert, John Oliver, and Steve Carell - plus some of The Daily Show's most prominent guests and adversaries: John and Cindy McCain, Glenn Beck, Tucker Carlson, and many more. This oral history takes the reader behind the curtain for all the show's highlights, from its origins as Comedy Central's underdog late-night program to Trevor Noah's succession, rising from a scrappy jester in the 24-hour political news cycle to become part of the beating heart of politics-a trusted source for not only comedy but also commentary, with a reputation for calling bullshit and an ability to effect real change in the world. Through years of incisive election coverage, passionate debates with President Obama and Hillary Clinton, feuds with Bill O'Reilly and Fox, and provocative takes on Wall Street and racism, The Daily Show has been a cultural touchstone. Now, for the first time, the people behind the show's seminal moments come together to share their memories of the last-minute rewrites, improvisations, pranks, romances, blow-ups, and moments of Zen both on and off the set of one of America's most groundbreaking shows.

Organizations, Accidents, and Nuclear Weapons

Managing Major Hazards

Reducing Our Vulnerabilities to Natural, Industrial, and Terrorist Disasters

International Workshop, MMAS 2018, Stockholm, Sweden, July 14, 2018, Revised Selected Papers

The Systems Bible

Fooled by Randomness

An Essay on the Selection of Technological and Environmental Dangers

Major accidents are rare events due to the many barriers, safeguards and defences developed by modern technologies. But they continue to happen with saddening regularity and their human and financial consequences are all too often unacceptably catastrophic. One of the greatest challenges we face is to develop more effective ways of both understanding and limiting their occurrence. This lucid book presents a set of common principles to further our knowledge of the causes of major accidents in a wide variety of high-technology systems. It also describes tools and techniques for managing the risks of such organizational accidents that go beyond those currently available to system managers and safety professionals. James Reason deals comprehensively with the prevention of major accidents arising from human and organizational causes. He argues that the same general principles and management techniques are appropriate for many different domains. These include banks and insurance companies just as much as nuclear power plants, oil exploration and production companies, chemical process installations and air, sea and rail transport. Its unique combination of principles and practicalities make this seminal book essential reading for all whose daily business is to manage, audit and regulate hazardous technologies of all kinds. It is relevant to those concerned with understanding and controlling human and organizational factors and will also interest academic readers and those working in industrial and government agencies.

A new approach to safety, based on systems thinking, that is more effective, less costly, and easier to use than current techniques. Engineering has experienced a technological revolution, but the basic engineering techniques applied in safety and reliability engineering, created in a simpler, analog world, have changed very little over the years. In this groundbreaking book, Nancy Leveson proposes a new approach to safety—more suited to today's complex, sociotechnical, software-intensive world—based on modern systems thinking and systems theory. Revisiting and updating ideas pioneered by 1950s aerospace engineers in their System Safety concept, and testing her new model extensively on real-world examples, Leveson has created a new approach to safety that is more effective, less expensive, and easier to use than current techniques. Arguing that traditional models of causality are inadequate, Leveson presents a new, extended model of causation (Systems-Theoretic Accident Model and Processes, or STAMP), then shows how the new model can be used to create techniques for system safety engineering, including accident analysis, hazard analysis, system design, safety in operations, and management of safety-critical systems. She applies the new techniques to real-world events including the friendly-fire loss of a U.S. Blackhawk helicopter in the first Gulf War; the Vioxx recall; the U.S. Navy SUBSAFE program; and the bacterial contamination of a public water supply in a Canadian town. Leveson's approach is relevant even beyond safety engineering, offering techniques for "reengineering" any large sociotechnical system to improve safety and manage risk.

This text analyzes the social side of technological risk. It argues that the conventional engineering approach to ensuring safety fails because systems complexity makes failures inevitable. It provides a framework for analyzing risks and the complex systems which often engender them.

A journalist recounts the surprising history of accidents and reveals how they've come to define all that's wrong with America. We hear it all the time: "Sorry, it was just an accident." And we've been deeply conditioned to just accept that explanation and move on. But as Jessie Singer argues convincingly: There are no such things as accidents. The vast majority of mishaps are not random but predictable and preventable. Singer uncovers just how the term "accident" itself protects those in power and leaves the most vulnerable in harm's way, preventing investigations, pushing off debts, blaming the victims, diluting anger, and even sparking empathy for the perpetrators. As the rate of accidental death skyrockets in America, the poor and people of color end up bearing the brunt of the violence and blame, while the powerful use the excuse of the "accident" to avoid consequences for their actions. Born of the death of her best friend, and the killer who insisted it was an accident, this book is a moving investigation of the sort of tragedies that are all too common, and all too commonly ignored. In this revelatory book, Singer tracks accidental death in America from turn of the century factories and coal mines to today's urban highways, rural hospitals, and Superfund sites. Drawing connections between traffic accidents, accidental opioid overdoses, and accidental oil spills, Singer proves that what we call accidents are hardly random. Rather, who lives and dies by an accident in America is defined by money and power. She also presents a variety of actions we can take as individuals and as a society to stem the tide of "accidents"—saving lives and holding the guilty to account.

The War on Normal People

The Limits of Safety

A Novel

The Failure of Organizations in New York and the Nation

Living with High-risk Technologies

What Plane Crashes, Oil Spills, and Dumb Business Decisions Can Teach Us About How to Succeed at Work and at Home

Sleep Disorders and Sleep Deprivation

At seventeen, Lech Blaine walked away unharmed from a car crash that killed three of his friends and left two in comas. On a May night in 2009, seven boys in Toowoomba, Queensland, piled into a car. They never arrived at their destination. The driver made a routine error, leading to a head-on collision. In the aftermath, rumours about speed and drink driving erupted. There was intense scrutiny from media and police. Lech used alcohol to numb his grief and social media to show stoicism, while secretly spiralling towards depression and disgrace. This is a riveting account of family, friendship, grief and love after tragedy. In a country where class and sport dominate, and car crashes compete with floods and pandemics for headlines, our connection with others is what propels us on. Heartbreaking and darkly hilarious, Car Crash is a story for our times. 'Scarifying and unforgettable, Car Crash is a story of carnage and life-long consequences – not just from a single, sudden catastrophe but from the long, slow cataclysm of masculine confusion. A brave and unsettling account.' —Tim Winton 'A heart-soaring act of literary bravery where the ongoing cost of experience is exposed in every note-perfect sentence. This is a profound reflection on the deafening soul noise heard by a beautiful group of young friends fated to live the rest of their lives with the silence of the dead. Some books just have to be written. And some books just have to be read.' —Trent Dalton 'I began this book with my guts in my mouth. Then, as I read on, I winced with recognition, I laughed a lot and my heart gradually broke open. It's odd to talk about "talent" when a book covers such sensitive, sad subject matter, but the truth is that Blaine has it. There are strong sentences, clarity of intent and tone, wicked one-liners and a mastery of metaphor. This book is for everyone – it truly captures something of "modern Australia" in a tenderly told story of one young man's tumultuous coming-of-age.' —Bri Lee 'Car Crash is a clear-eyed, bruising and tender account of how the moments that thrust you into adulthood can take place in seconds. Lech Blaine's journalism has long made me suspect he's one of the best writers of his generation. Car Crash confirms it, without a doubt.' —Ben Law

"A complex and captivating tale" (The Boston Globe) which takes an engrossing look at the darker side of a marriage—and at how an ordinary family responds to an extraordinary crisis, forcing a couple to decide when a marriage is too broken to fix. Maddy, a social worker, is trying to balance her career and three children, but her husband's verbal furies have made the family wary and frightened. Where once his fiery passion had been reserved for defending his clients, now he's lashing out at all of them. She vacillates between tiptoeing around him and asserting herself for the sake of their kids—keeping a fragile peace—until the rainy day when they're together in the car and Ben's volatile temper gets the best of him, leaving Maddy in the hospital fighting for her life. Randy Susan Meyers takes us inside the hearts and minds of her characters, alternating among the perspectives of Maddy, Ben, and their fourteen-year-old daughter, Emma. A People magazine Book Pick, Accidents of Marriage is a "beautifully written, poignant, and thought-provoking novel" (Kirkus Reviews, starred review) that will resonate deeply with women from all walks of life, ultimately revealing the challenges of family, faith, and forgiveness.

The ability to see deeply affects how human beings perceive and interpret the world around them. For most people, eyesight is part of everyday communication, social activities, educational and professional pursuits, the care of others, and the maintenance of personal health, independence, and mobility. Functioning eyes and vision system can reduce an adult's risk of chronic health conditions, death, falls and injuries, social isolation, depression, and other psychological problems. In children, properly maintained eye and vision health contributes to a child's social development, academic achievement, and better health across the lifespan. The public generally recognizes its reliance on sight and fears its loss, but emphasis on eye and vision health, in general, has not been integrated into daily life to the same extent as other health promotion activities, such as teeth brushing; hand washing; physical and mental exercise; and various injury prevention behaviors. A larger population health approach is needed to engage a wide range of stakeholders in coordinated efforts that can sustain the scope of behavior change. The shaping of socioeconomic environments can eventually lead to new social norms that promote eye and vision health. Making Eye Health a Population Health Imperative: Vision for Tomorrow proposes a new population-centered framework to guide action and coordination among various, and sometimes competing, stakeholders in pursuit of improved eye and vision health and health equity in the United States. Building on the momentum of previous public health efforts, this report also introduces a model for action that highlights different levels of prevention activities across a range of stakeholders and provides specific examples of how population health strategies can be translated into cohesive areas for action at federal, state, and local levels.

Six starred reviews! A bold and irreverent YA novel that powerfully reminds us that there are many different types of remarkable, The Rest of Just Live Here is from novelist Patrick Ness, author of the Carnegie Medal- and Kate Greenaway Medal-winning A Monster Calls and the critically acclaimed Chaos Walking trilogy. What if you aren't the Chosen One? The one who's supposed to fight the zombies, or the soul-eating ghosts, or whatever the heck this new thing is, with the blue lights and the death? What if you're like Mikey? Who just wants to graduate and go to prom and maybe finally work up the courage to ask Henna out before someone goes and blows up the high school. Again. Because sometimes there are problems bigger than this week's end of the world, and sometimes you just have to find the extraordinary in your ordinary life. Even if your best friend is worshipped by mountain lions. ALA Best Fiction for Young Adults * Cooperative Children's Book Center CCBC Choice * Michael Printz Award shortlist * Kirkus Best Book of the Year * VOYA Perfect Ten * NYPL Top Ten Best Books of the Year for Teens * Chicago Public Library Best Teen Books of the Year * Publishers Marketplace Buzz Books * ABC Best Books for Children * Bank Street Best Books List

7 Days to Your First 3D Print

Accidents of Marriage

Drift into Failure

Car Crash

Vision for Tomorrow

The Rest of Us Just Live Here

Careful

Fooled by Randomness is a standalone book in Nassim Nicholas Taleb's landmark Incerto series, an investigation of opacity, luck, uncertainty, probability, human error, risk, and decision-making in a world we don't understand. The other books in the series are The Black Swan, Antifragile, Skin in the Game, and The Bed of Procrustes. Fooled by Randomness is the word-of-mouth sensation that will change the way you think about business and the world. Nassim Nicholas Taleb–veteran trader, renowned risk expert, polymathic scholar, erudite raconteur, and New York Times bestselling author of The Black Swan–has written a modern classic that turns on its head what we believe about luck and skill. This book is about luck-or more precisely, about how we perceive and deal with luck in life and business. Set against the backdrop of the most conspicuous forum in which luck is mistaken for skill-the world of trading-Fooled by Randomness provides captivating insight into one of the least understood factors in all our lives. Writing in an entertaining narrative style, the author tackles major intellectual issues related to the underestimation of the influence of happenstance on our lives. The book is populated with an array of characters, some of whom have grasped, in their own way, the significance of chance: the baseball legend Yogi Berra; the philosopher of knowledge Karl Popper; the ancient world's wisest man, Solon; the modern financier George Soros; and the Greek voyager Odysseus. We also meet the fictional Nero, who seems to understand the role of randomness in his professional life but falls victim to his own superstitious foolishness. However, the most recognizable character of all remains unnamed-the lucky fool who happens to be in the right place at the right time-he embodies the "survival of the least fit." Such individuals attract devoted followers who believe in their guru's insights and methods. But no one can replicate what is obtained by chance. Are we capable of distinguishing the fortunate charlatan from the genuine visionary? Must we always try to uncover nonexistent messages in random events? It may be impossible to guard ourselves against the vagaries of the goddess Fortuna, but after reading Fooled by Randomness we can be a little better prepared. Named by Fortune One of the Smartest Books of All Time A Financial Times Best Business Book of the Year

Can we know the risks we face, now or in the future? No, we cannot; but yes, we must act as if we do. Some dangers are unknown; others are known, but not by us because no one person can know everything. Most people cannot be aware of most dangers at most times. Hence, no one can calculate precisely the total risk to be faced. How, then, do people decide which risks to take and which to ignore? On what basis are certain dangers guarded against and others relegated to secondary status? This book explores how we decide what risks to take and which to ignore, both as individuals and as a culture.

Environmental tragedies such as Chernobyl and the Exxon Valdez remind us that catastrophic accidents are always possible in a world full of hazardous technologies. Yet, the apparently excellent safety record with nuclear weapons has led scholars, policy-makers, and the public alike to believe that nuclear arsenals can serve as a secure deterrent for the foreseeable future. In this provocative book, Scott Sagan challenges such optimism. Sagan's research into formerly classified archives penetrates the veil of safety that has surrounded U.S. nuclear weapons and reveals a hidden history of frightening "close calls" to disaster.

Normal Accidents analyzes the social side of technological risk. Charles Perrow argues that the conventional engineering approach to ensuring safety-building in more warnings and safeguards-fails because systems complexity makes failures inevitable. He asserts that typical precautions, by adding to complexity, may help create new categories of accidents. (At Chernobyl, tests of a new safety system helped produce the meltdown and subsequent fire.) By recognizing two dimensions of risk—complex versus linear interactions, and tight versus loose coupling—this book provides a powerful framework for analyzing risks and the organizations that insist we run them. The first edition fulfilled one reviewer's prediction that it "may mark the beginning of accident research." In the new afterword to this edition Perrow reviews the extensive work on the major accidents of the last fifteen years, including Bhopal, Chernobyl, and the Challenger disaster. The new postscript probes what the author considers to be the "quintessential 'Normal Accident'" of our time: the Y2K computer problem.

The Book of Lies

Engineering the Transformation of the Enterprise

The Beginner's Guide to Systems Large and Small

A Memoir

Nuclear Weapons, the Damascus Accident, and the Illusion of Safety

Tears of a Tiger

The Next Catastrophe

To the constant disappointment of his mother and his teachers, Joey has trouble paying attention or controlling his mood swings when his prescription medications wear off and he starts getting worked up and acting wired.

From 2020 Democratic presidential candidate Andrew Yang, a captivating account of how "a skinny Asian kid from upstate" became a successful entrepreneur, only to find a new mission: calling attention to the urgent steps America must take, including Universal Basic Income, to stabilize our economy amid rapid technological change and automation. The shift toward automation is about to create a tsunami of unemployment. Not in the distant future--now. One recent estimate predicts 45 million American workers will lose their jobs within the next twelve years--jobs that won't be replaced. In a future marked by restlessness and chronic unemployment, what will happen to American society? In The War on Normal People, Andrew Yang paints a dire portrait of the American economy. Rapidly advancing technologies like artificial intelligence, robotics and automation software are making millions of Americans' livelihoods irrelevant. The consequences of these trends are already being felt across our communities in the form of political unrest, drug use, and other social ills. The future looks dire-but is it unavoidable? In The War on Normal People, Yang imagines a different future--one in which having a job is distinct from the capacity to prosper and seek fulfillment. At this vision's core is Universal Basic Income, the concept of providing all citizens with a guaranteed income-and one that is rapidly gaining popularity among forward-thinking politicians and economists. Yang proposes that UBI is an essential step toward a new, more durable kind of economy, one he calls "human capitalism."

Being the Third Edition of Systemantics, extensively revised and expanded by the addition of several new Chapters including new Axioms, Theorems, and Rules of Thumb, together with many new Case Histories and Horrible Examples.

This book presents selected topics in implementing a risk-based approach for complex engineering systems in general, and nuclear plants in particular. It addresses gap areas in implementing the risk-based approach to design, operation and regulation, covering materials reliability, digital system reliability, software reliability, human factor considerations, condition monitoring and prognosis, structural aspects in risk-based design as well as the application aspects like asset management for first-of-their-kind projects, strategic management and other academic aspect. Chapters are authored by renowned experts who address some of the identified challenges in implementation of risk-based approach in a clear and cogent manner, using illustrations, tables and photographs for ease of

communication. This book will prove useful to researchers, professionals, and students alike.
Risk Based Technologies
The Secret History of Us
Classic, Contemporary, and Critical Readings
Engineering a Safer World
Behind Human Error
Command and Control
An Unmet Public Health Problem

‖Gripping, page-turning material . . . a new way of thinking about survival in a world filled with hazards and distractions.‖ ‖Charles Duhigg, author of Smarter Faster Better and The Power of Habit A safety expert reveals why few of us are as careful as we think we are, and what we can do about it. As doctors and medical researchers work busily to extend our lives, more people each year are figuring out ways to cut them short. In fact, after a hundred years of steady decline, the rate at which people are being injured (or worse) in everyday accidents is increasing. Blame car crashes, pedestrian fatalities, home-improvement projects gone wrong, medical mistakes, home fires‖not to mention all the crazy things that kids are into these days. And the problem seems to be spinning out of control. Steve Casner has devoted his career to studying the psychology of safety, and he knows there‖s not a safety warning we won‖t ignore or a foolproof device we can‖t turn into an implement of disaster. Casner details the psychological traps that prevent us from being more careful. They‖re the same whether you‖re a pilot, a Hollywood stuntwoman, a parent, or the owner of a clogged dishwasher you‖re trying to fix with a screwdriver. Then he shows us gripping real examples of how and when injuries happen, so we know exactly what we should really be worrying about. Careful arms readers with the latest science on how our sometimes fallible minds work, with countless takeaways to incorporate at home, at work, and everywhere in between. This book will help us keep our fingers attached in the kitchen, our kids afloat at the pool, and our teens safe behind the wheel, and demonstrates the many other ways we can maximize our chances of getting through the day in one piece. Three boys struggle to come to terms with the death of a friend in a drunk-driving auto accident in which all four were involved, in a story told through newspaper stories, diary entries, school announcements, telephone conversations, and classroom assignments.

‖Jessi Kirby‖s books just keep getting better and better, and The Secret History of Us is her best yet. It beautifully touches on all the most important things in life‖love, family, friendship, memory, and bacon. I loved it.‖Morgan Matson, New York Times bestselling author of The Unexpected Everything In this gorgeously written, emotional novel that fans of Sarah Dessen will enjoy, a teenage girl must piece together the parts of her life she doesn‖t remember after a severe collision leaves her with no memory of the past four years. When Olivia awakes in a hospital bed following a near-fatal car accident, she can‖t remember how she got there. She figures it‖s because she was in a coma for a week, but as time goes on, she realizes she‖s lost more than just the last week of her life‖she‖s lost all memory of events that happened years ago. Gone is any recollection of starting or graduating high school; the prom; or her steady boyfriend Matt. Trying to figure out who she is feels impossible when everyone keeps telling her who she was. As Liv tries to sort out her family and friends‖ perceptions of her, the one person she hasn‖t heard enough from is Walker, the guy who saved her the night her car was knocked off that bridge into the bay below. Walker is the hardened boy who‖s been keeping his distance and the one person that has made Liv feel like her old self‖whoever that is. With feelings growing for Walker, tensions rising with Matt, and secrets she can‖t help but feel are being kept from her, Olivia must find her place in a life she doesn‖t remember living.

NATIONAL BESTSELLER ‖ A family returns to their hometown‖and to the dark past that haunts them still‖in this masterpiece of literary horror by the New York Times bestselling author of Wanderers ‖The dread, the scope, the pacing, the turns‖I haven‖t felt all this so intensely since The Shining.‖‖Stephen Graham Jones, New York Times bestselling author of The Only Good Indians NAMED ONE OF THE BEST BOOKS OF THE YEAR BY THE NEW YORK PUBLIC LIBRARY AND LIBRARY JOURNAL Long ago, Nathan lived in a house in the country with his abusive father‖and has never told his family what happened there. Long ago, Maddie was a little girl making dolls in her bedroom when she saw something she shouldn‖t have‖and is trying to remember that lost trauma by making haunting sculptures. Long ago, something sinister, something hungry, walked in the tunnels and the mountains and the coal mines of their hometown in rural Pennsylvania. Now, Nate and Maddie Graves are married, and they have moved back to their hometown with their son, Oliver. And now what happened long ago is happening again . . . and it is happening to Oliver. He meets a strange boy who becomes his best friend, a boy with secrets of his own and a taste for dark magic. This dark magic puts them at the heart of a battle of good versus evil and a fight for the soul of the family‖and perhaps for all of the world. But the Graves family has a secret weapon in this battle: their love for one another.

The Glass Castle
The Book of Accidents
3D Printing Without Prior Knowledge
Making Eye Health a Population Health Imperative
A User's Guide to Our Injury-Prone Minds
A Strategy for the FAA's Aircraft Certification Service
The Daily Show (The Book)

This volume of primary readings and overview essays provides a comprehensive introduction to the sociology of organizations. The readings represent a wide range of theoretical perspectives and substantive topics. Most readings are either classics in the field or works that are widely used and cited.

The Oscar-shortlisted documentary Command and Control, directed by Robert Kenner, finds its origins in Eric Schlosser's book and continues to explore the little-known history of the management and safety concerns of America's nuclear arsenal. "A devastatingly lucid and detailed new history of nuclear weapons in the U.S. Fascinating." —Lev Grossman, TIME Magazine "Perilous and gripping . . . Schlosser skillfully weaves together an engrossing account of both the science and the politics of nuclear weapons safety." —San Francisco Chronicle A myth-shattering exposé of America's nuclear weapons Famed investigative journalist Eric Schlosser digs deep to uncover secrets about the management of America's nuclear arsenal. A groundbreaking account of accidents, near misses, extraordinary heroism, and technological breakthroughs, Command and Control explores the dilemma that has existed since the dawn of the nuclear age: How do you deploy weapons of mass destruction without being destroyed by them? That question has never been resolved—and Schlosser reveals how the combination of human fallibility and technological complexity still poses a grave risk to mankind. While the harms of global warming increasingly dominate the news, the equally dangerous yet more immediate threat of nuclear weapons has been largely forgotten. Written with the vibrancy of a first-rate thriller, Command and Control interweaves the minute-by-minute story of an accident at a nuclear missile silo in rural Arkansas with a historical narrative that spans more than fifty years. It depicts the urgent effort by American scientists, policy makers, and military officers to ensure that nuclear weapons can't be stolen, sabotaged, used without permission, or detonated inadvertently. Schlosser also looks at the Cold War from a new perspective, offering history from the ground up, telling the stories of bomber pilots, missile commanders, maintenance crews, and other ordinary servicemen who risked their lives to avert a nuclear holocaust. At the heart of the book lies the struggle, amid the rolling hills and small farms of Damascus, Arkansas, to prevent the explosion of a ballistic missile carrying the most powerful nuclear warhead ever built by the United States. Drawing on recently declassified documents and interviews with people who designed and routinely handled nuclear weapons, Command and Control takes readers into a terrifying but fascinating world that, until now, has been largely hidden from view. Through the details of a single accident, Schlosser illustrates how an unlikely event can become unavoidable, how small risks can have terrible consequences, and how the most brilliant minds in the nation can only provide us with an illusion of control. Audacious, gripping, and unforgettable, Command and Control is a tour de force of investigative journalism, an eye-opening look at the dangers of America's nuclear age.

Journalist Walls grew up with parents whose ideals and stubborn nonconformity were their curse and their salvation. Rex and Rose Mary and their four children lived like nomads, moving among Southwest desert towns, camping in the mountains. Rex was a charismatic, brilliant man who, when sober, captured his children's imagination, teaching them how to embrace life fearlessly. Rose Mary painted and wrote and couldn't stand the responsibility of providing for her family. When the money ran out, the Walls retreated to the dismal West Virginia mining town Rex had tried to escape. As the dysfunction escalated, the children had to fend for themselves, supporting one another as they found the resources and will to leave home. Yet Walls describes her parents with deep affection in this tale of unconditional love in a family that, despite its profound flaws, gave her the fiery determination to carve out a successful life. -- From publisher description.

3D printing without prior knowledge – 7 days to your first 3D print 2 in 1: You will receive the eBook in PDF format free of charge when you buy the paperback! Wouldn't you also like to own your own 3D printer and realise your ideas quickly and easily? No problem – this 3D printing guide will help you understand the basic workings of a 3D printer in no time. This guide covers the basics of 3D printing. Real practical examples help to understand the technology. With the help of this beginner's guide, many satisfied readers have already been able to get into the subject matter and expand their own skills – see for yourself! Advantages of this book: Simply explained – written in a way that everyone can understand To the point – 105 pages in a practical pocketbook format Proximity to everyday life – real practical examples Clearly arranged and structured – important reminders are highlighted Bonus chapter What the book contains: How does a 3D printer work? Which printer is best for me? -> including concrete purchase advice! From the idea to the machine code -> Where do I find models, what programs are available? From machine code to 3D printing The 10 most frequent causes of faults and their remedies Bonus: Gift idea: individual lithophane pictures Don't hesitate any longer! Order the guide now and you will soon understand the basics of 3D printing!

Risk and Culture
Meltdown
Living with High Risk Technologies – Updated Edition
The Deadly Rise of Injury and Disaster—Who Profits and Who Pays the Price
Improving the Continued Airworthiness of Civil Aircraft
A Design Science Research Perspective
Managing the Risks of Organizational Accidents

Aleister Crowley's The Book of Lies is an important and complex work of occultism. Deciphering its many layers of hidden meaning requires a little patience and more than a beginner's knowledge of Thelema. For those interested in passing beyond the initiate stage, the reward offered by a deeper understanding of this challenging text is well worth the effort. This new 2018 edition of The Book of Lies from Kismet Publishing restores all of Crowley's original text, including the important keys, sigils and diagrams often omitted from reprints.

Human error is cited over and over as a cause of incidents and accidents. The result is a widespread perception of a 'human error problem', and solutions are thought to lie in changing the people or their role in the system. For example, we should reduce the human role with more automation, or regiment human behavior by stricter monitoring, rules or procedures. But in practice, things have proved not to be this simple. The label 'human error' is prejudicial and hides much more than it reveals about how a system functions or malfunctions. This book takes you behind the human error label. Divided into five parts, it begins by summarising the most significant research results. Part 2 explores how systems thinking has radically changed our understanding of how accidents occur. Part 3 explains the role of cognitive system factors - bringing knowledge to bear, changing mindset as situations and priorities change, and managing goal conflicts - in operating safely at the sharp end of systems. Part 4 studies how the clumsy use of computer technology can increase the potential for erroneous actions and assessments in many different fields of practice. And Part 5 tells how the hindsight bias always enters into attributions of error, so that what we label human error actually is the result of a social and psychological judgment process by stakeholders in the system in question to focus on only a facet of a set of interacting contributors. If you think you have a human error problem, recognize that the label itself is no explanation and no guide to countermeasures. The potential for constructive change, for progress on safety, lies behind the human error label.

As part of the national effort to improve aviation safety, the Federal Aviation Administration (FAA) chartered the National Research Council to examine and recommend improvements in the aircraft certification process currently used by the FAA, manufacturers, and operators.

Nick and Allie don't survive the crash, and now they are in limbo, stuck halfway between life and death, in a netherworld known as Everlost. Everlost is home to those who didn't make it to their final destination: A magical yet dangerous place filled with shadows where lost souls run wild. Shocked and frightened, Nick and Allie aren't ready to rest in peace just yet. They want their lives back. Desperate for a way out, their search takes them deep into the uncharted regions of Everlost. But the longer they stay, the more they forget about their past lives. And with all memory of home fading fast and an unknown evil lurking in the shadows, Nick and Allie may never escape this strange, terrible world. In this imaginative, supernatural thriller, Neal Shusterman explores questions of life, death, and what just might lie in between.

There Are No Accidents
Massively Multi-Agent Systems II
Friendly Fire
Systems Thinking Applied to Safety
From Hunting Broken Components to Understanding Complex Systems
An Oral History as Told by Jon Stewart, the Correspondents, Staff and Guests
Joey Pigza Swallowed the Key

A noted Yale sociologist examines how and why catastrophic accidents occur in high-tech industries—nuclear power, petrochemical, and aerospace—and argues that they are becoming nearly inevitable in our advanced technological society. Clinical practice related to sleep problems and sleep disorders has been expanding rapidly in the last few years, but scientific research is not keeping pace. Sleep apnea, insomnia, and restless legs syndrome are three examples of very common disorders for which we have little biological information. This new book cuts across a variety of medical disciplines such as neurology, pulmonology, pediatrics, internal medicine, psychiatry, psychology, otolaryngology, and nursing, as well as other medical practices with an interest in the management of sleep pathology. This area of research is not limited to very young and old patientsâ€"sleep disorders reach across all ages and ethnicities. Sleep Disorders and Sleep Deprivation presents a structured analysis that explores the following: Improving awareness among the general public and health care professionals. Increasing investment in interdisciplinary somnology and sleep medicine research training and mentoring activities. Validating and developing new and existing technologies for diagnosis and treatment. This book will be of interest to those looking to learn more about the enormous public health burden of sleep disorders and sleep deprivation and the strikingly limited capacity of the health care enterprise to identify and treat the majority of individuals suffering from sleep problems.

The topics in this book cover a broad range of research interests: from business engineering and its application in corporate and business networking contexts to design science research as well as applied topics, where those research methods have been employed for modeling, data warehousing, information systems management, enterprise architecture management, management of large and complex projects, and enterprise transformation. The book is a Festschrift for Robert Winter in order to appreciate his work and to honor him as a personality with a high reputation in the information systems community. To this end, many professional colleagues or long-time companions both from the Institute of Information Management at the University of St. Gallen as well as from the international research community dedicated articles on topics related to Robert's research. They reflect his ambition to uncompromisingly conduct high-class research that fuels the research community and at the same time contributes to improved industrial practice. The book is organized in three major parts: Part I "Business Engineering and Beyond" focuses on the methodology strongly shaped by Robert in St. Gallen with a focus on research being applied in corporate contexts. Part II "Design Science Research" spans from reflections on the practice of design science research to perspectives on design science research methodologies and eventually up to considerations to teach design science research methodology. Part III "Applied Fields" combines various applications of design science and related research methodologies with practical problems and future research topics.

I'm in the middle of a full-blown spaz-attack, and I don't care. I don't care at all. At home I always try to act normal, and spaz-attacks definitely aren't normal. Here, people understand. They know a spaz-attack signals that I'm excited. They're excited too, so they squeal with me; some even spaz on purpose, if you can call that spazzing . . . An unforgettable coming-of-age novel about what it's like to live with a physical disability It's the summer of 1970. Seventeen-year-old Jean has cerebral palsy, but she's always believed she's just the same as everyone else. She's never really known another disabled person before she arrives at Camp Courage. As Jean joins a community unlike any she has ever imagined, she comes to question her old beliefs and look at the world in a new light. The camp session is only ten days long, but that may be all it takes to change a life forever. Henry Holt published Harriet McBryde Johnson's adult memoir, Too Late to Die Young, in April 2005. Ms. Johnson has been featured in The New York Times Magazine and has been an activist for disability rights for many years.

The Hidden Role of Chance in Life and in the Markets
The Everlost
The Truth About America's Disappearing Jobs and Why Universal Basic Income Is Our Future
The Accidental Shootdown of U.S. Black Hawks over Northern Iraq
The AIDS Disaster
The Sociology of Organizations
Accidents of Nature

Many organisations live with hazards that have the potential to cause disaster. This was the case at Moura underground coal mine in Central Queensland, where 11 men died in an explosion in 1994. Andrew Hopkins shows that the explosion was the result of organisational failure, and uses it to draw lessons about managing major hazards. He argues that there are always tell-tale signs of impending disaster, and that organisations need to find ways of gathering this information and reacting to it appropriately. The Moura story also demonstrates the need to move responsibility for risk management up the corporate hierarchy to ensure that it is not overshadowed by production pressures. Otherwise disasters will repeat themselves in horrifyingly similar ways. Managing Major Hazards is a gripping story and essential reading for occupational health and safety professionals, executives working in hazardous industries, policy makers, and readers interested in risk management and disaster studies.

This book contains revised selected and invited papers presented at the International Workshop on Massively Multi-Agent Systems, MMAS 2018, held in Stockholm, Sweden, in July 2018. The 7 revised full papers presented were carefully reviewed and selected for inclusion in this volume. Also included are 3 post-workshop papers. The papers discuss enabling technologies, new architectures, promising applications, and challenges of massively multi-agent systems in the era of IoT. They are organized in the following topical sections: multi-agent systems and Internet of Things; architectures for massively multi-agent systems; and applications of massively multi-agent systems.

On April 14, 1994, two U.S. Air Force F-15 fighters accidentally shot down two U.S. Army Black Hawk Helicopters over Northern Iraq, killing all twenty-six peacekeepers onboard. In response to this disaster the complete array of military and civilian investigative and judicial procedures ran their course. After almost two years of investigation with virtually unlimited resources, no culprit emerged, no bad guy showed himself, no smoking gun was found. This book attempts to make sense of this tragedy--a tragedy that on its surface makes no sense at all. With almost twenty years in uniform and a Ph.D. in organizational behavior, Lieutenant Colonel Snook writes from a unique perspective. A victim of friendly fire himself, he develops individual, group, organizational, and cross-level accounts of the accident and applies a rigorous analysis based on behavioral science theory to account for critical links in the causal chain of events. By explaining separate pieces of the puzzle, and analyzing each at a different level, the author removes much of the mystery surrounding the friendly fire shootdown. Based on a grounded theory analysis, Snook offers a dynamic, cross-level mechanism he calls "practical drift"--the slow, steady uncoupling of practice from written procedure--to complete his explanation. His conclusion is disturbing. This accident happened because, or perhaps in spite of everyone behaving just the way we would expect them to behave, just the way theory would predict. The shootdown was a normal accident in a highly reliable organization.

Charles Perrow is famous worldwide for his ideas about normal accidents, the notion that multiple and unexpected failures--catastrophes waiting to happen--are built into our society's complex systems. In The Next Catastrophe, he offers crucial insights into how to make us safer, proposing a bold new way of thinking about disaster preparedness. Perrow argues that rather than laying exclusive emphasis on protecting targets, we should reduce their size to minimize

damage and diminish their attractiveness to terrorists. He focuses on three causes of disaster--natural, organizational, and deliberate--and shows that our best hope lies in the deconcentration of high-risk populations, corporate power, and critical infrastructures such as electric energy, computer systems, and the chemical and food industries. Perrow reveals how the threat of catastrophe is on the rise, whether from terrorism, natural disasters, or industrial accidents. Along the way, he gives us the first comprehensive history of FEMA and the Department of Homeland Security and examines why these agencies are so ill equipped to protect us. The Next Catastrophe is a penetrating reassessment of the very real dangers we face today and what we must do to confront them. Written in a highly accessible style by a renowned systems-behavior expert, this book is essential reading for the twenty-first century. The events of September 11 and Hurricane Katrina--and the devastating human toll they wrought--were only the beginning. When the next big disaster comes, will we be ready? In a new preface to the paperback edition, Perrow examines the recent (and ongoing) catastrophes of the financial crisis, the BP oil spill, and global warming.

The lessons of the Moura Mine disaster

Living with High Risk Technologies

Normal Accidents