

Praise for *The Spirit of a Cyborg*

“*The Spirit of a Cyborg* offers the rare perspective of a pioneering technologist confronting the profound implications of artificial intelligence with intellectual rigor and moral sensitivity. Borenstein weaves together personal memoir, technical history, and spiritual reflection to explore what it means to remain fully human while building increasingly powerful machines. Warm, candid, and deeply thoughtful, this book invites readers to imagine a future shaped not only by technological possibility but by compassion, responsibility, and hope—reminding us that the destiny of our machines is inseparable from the values we choose to guide them.”

—**MITCH KAPOR**, Founder of Lotus Development,
Electronic Frontier Foundation, and Mozilla Foundation

“Nathaniel is at the same time a technologist, an entrepreneur, a philosopher and moralist, a choral singer, a family man, and many other things. In *The Spirit of a Cyborg*, we can follow along with him as he sketches his adult life and ties into it the technology and events that shaped it. Read and see how the internet developed and changed the world as it molded Nathaniel’s life, and get his view of some of the moral, spiritual, and political concerns along the way.”

—**BARRY LEIBA**, Director of Internet Standards, Futurewei Technologies

“Skillfully blending autobiography with thoughtful observations about where we are with technology and (maybe more importantly) where we’re likely to go, Dr. Nathaniel Borenstein has written a thought-provoking book. He addresses a question that has received very little attention up until this point: As we rely more and more on AI, how will we train it to do what’s ethical? So often in science we charge ahead and only worry about the ethics of what we’re doing afterward. This is Dr. Borenstein’s call to think of the ethical ramifications of AI before it’s too late. It should be required reading for our policy makers and anyone else who cares about the ways in which the Information Revolution is changing our lives—for both good and bad.”

—**ONORIO CATENACCI A.K.A. THE IMPRACTICAL ENGINEER**,
Senior Software Developer and Functional Programmer

“Nathaniel Borenstein’s decades of impact on computing and the internet echo in the tools you now rely on daily. Yet it’s this book that is his real legacy, or should be: a survey of the human condition in its myriad aspects, the ways we are responding—for good and ill—to rapid technological changes, and thoughtful suggestions about how to play a more active role in creating the cyborg future in which we must inevitably live. All of this is presented in a kaleidoscope of vignettes, variously autobiographical, historical, observational, and philosophical; frequently funny, fascinating, heartbreaking, and profound. There’s a “ha!” or a “huh!” on almost every page. How can we reconcile the evils of social media with the good it does? What essential needs *can’t* be addressed by information technology, and how can we balance those with the siren song of being terminally online? How should spiritual traditions rooted in our agrarian past guide us in our cybernetic present? Will we be able to coexist with artificial beings whose intelligence dwarfs our own? This book doesn’t have all the answers. *But we do.* In these pages are the tools to get us started finding them.”

—**BOB GLICKSTEIN**, Established Software Engineer and
Co-Founder of The Internet Movie Database and Zanshin

“Nathaniel Borenstein’s eloquent memoir, *The Spirit of a Cyborg*, reminds us that today’s existential angst-ridden tech environment had its roots in a much more humanistic and idealistic culture than we experience today. Borenstein’s background in both religious studies and computer science lets him come to personal computing and the internet with the sense of compassion and optimism that informed his remarkable innovations. We need more stories like his to be told and shared as a reminder of where we come from and what possibilities still exist.”

—**ROBERT GEHORSAM**, Co-Author of *The Carbon Almanac*,
Founder of Forterra Systems, and Former CEO of Image Metrics

Nathaniel has been a clever, original-thinking, and pragmatic innovator since the early days of the commercial internet (at least!). As a largely solo developer and entrepreneur who has contributed to key internet infrastructure, his experience and perspective is interesting and valuable—and his stories are quite exciting.

—**JEFF MASON**, University Librarian Emeritus, Professor Emeritus of
Information and Economics, and Founding Partner of ApplEcon LLC

“*The Spirit of a Cyborg* is an exceptional journey. This memoir shares not only a unique history of the computer age through the eyes of a visionary inventor, the story of the bits and bytes and email systems is inspiring and infused with the humanity of Nathaniel Borenstein. This very human memoir of the digital age comes into our hands at the very moment that we cannot assess the true risks to humanity’s survival. *The Spirit of a Cyborg* is a must read.”

—**LEE STEIN**, Environmentalist, Venture Philanthropist,
Serial Entrepreneur, and Inventor

“The memoir is not only a reflection on technology by someone who happened to be present for part of its history. It is a book about what it means to remain human while becoming increasingly dependent on machines and increasingly responsible for what those machines make possible. I finished *The Spirit of a Cyborg* more hopeful about the future—not because the book minimizes risk, but because it places that risk inside a recognizable structure of human responsibility. Borenstein’s life makes the book’s argument concrete. He helped shape the internet. He watched parts of it go wrong. He saw it carry love when his family needed it. His body became dependent on intelligent machinery. Out of that, he wrote a book asking how humans, cyborgs, and AIs might share a future without forgetting what life is for. The book closed a circle for me. I always regarded technology as something abstract and mechanical. Now I can’t unsee it anymore: Technology is us. It’s what we’ve created, and it carries our intentions and shapes the world in which we decided we want to live. The book touched my mind, my heart, and my soul.”

—**FLORIAN BUETOW**, Generative AI and Software Engineer

“*The Spirit of a Cyborg* is an engaging and personal reflection on our world in the early days of the age of AI. Nathaniel Borenstein combines his there-from-the-beginning personal history of the early days of the internet and AI with spiritual reflections and thoughtful critiques of our use of computing. He balances optimism with critical concern and a willingness to ask hard and important questions. It is a worthy read for anyone who is concerned—and we all should be concerned—about where technology is taking us.

—**HARRY HOCHHEISER**, Professor of Biomedical Information Systems

“The Spirit of a Cyborg asks not only what technology does, but what it means for society. Borenstein weaves personal history with philosophical inquiry, exploring how innovations from email to AI have transformed our capacities, our communities, and our consciousness. This is technology critique from a hands-on innovator, rooted in ethics and sustained by the conviction that understanding our technological past is essential to shaping a hopeful future.”

—FRANK GERRATANA, Technology Patent Attorney and Legal Strategist

“Borenstein has created a highly readable, digestible memoir through which he evaluates the present and future of information technology. It is an adroit and timely work which I enjoyed reading, having lived through the period. He finds hope in Pandora’s IT box.”

—VINT CERF, Internet Pioneer

“A remarkable and timely book for anyone who cares about what artificial intelligence means for humanity. Nathaniel Borenstein writes with the rare authority of someone who helped build the very systems now reshaping civilization. He challenges technologists to think spiritually, spiritual leaders to think technologically, and all of us to imagine more boldly. ‘If we can envision a future worth hoping for, we may yet build it.’”

—ANNE LEER, Global Policy and AI Infrastructure Expert,
Chair, Oxford AI Leadership Forum