GET CYBERSECURITY DESIGN RIGHT THE FIRST TIME

Engineering Trustworthy Systems: Get Cybersecurity Design Right the First Time

DESIGN SECURE SYSTEMS ON TIME & ON BUDGET WITH THIS STEP-BY-STEP GUIDE

Informed by decades of practical cybersecurity engineering experience, *Engineering Trustworthy Systems* reveals **a comprehensive set of cybersecurity design principles** and how to apply them to **design, build, and operate robust, cost-effective cybersecurity systems** against even the most sophisticated attacks.

This professional guide lays out a **concise set of best practices and theories** that can be applied to real security design problems. Developed for self-study and classroom use, this book **explains complex cybersecurity concepts** in easy-to understand constructs.

Foreword by
**BRIAN SNOW**

READERS WILL EXPLORE:

How to think strategically from both the attackers' and defenders' perspectives

Detailed, real-world examples that span the entire spectrum of modern cyberattacks

Deployment of effective cybersecurity measures to broadly and deeply address the entire attack space

How to identify the highest priority risks using advanced assessment techniques

Never-before-published design principles
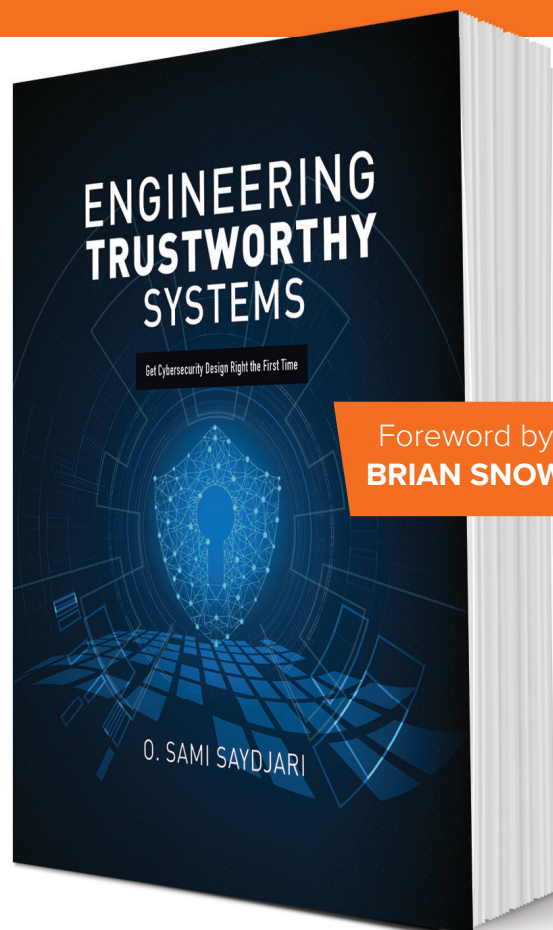
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ABOUT THE AUTHOR: O. SAMI SAYDJARI

O. Sami Saydjari has been a visionary and thought-leader in cybersecurity for thirty-five years working for elite organizations such as the Defense Advanced Research Projects Agency (DARPA).

He has published **more than a dozen landmark papers** in the field, **consulted to national leadership on cybersecurity policy**, and helps **inform the public** through interviews with major media organizations such as CNN, PBS, ABC, the *Financial Times*, the *Wall Street Journal*, and *Time* magazine. Mr. Saydjari currently heads a private strategic cybersecurity consulting firm called the Cyber Defense Agency Inc., and leads a nonprofit cybersecurity policy institution called Professionals for Cyber Defense.

Advance Praise for
Engineering Trustworthy Systems

"The 'bible' for cybersecurity, which needs to be consulted as we struggle to solve this enormous threat to our national security."

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"An authoritative, timeless, and practical guide, [this book] underscores that our opponents' reach, speed, and understanding of our vulnerabilities currently outmatch our defenses, which is why [...] our future depends on it."

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"Perfectly captures the asymmetrical nature of cyber-warfare [and] will help level the playing field and put the adversary on their heels."

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"Brings together [...] for the first time [...] the myriad cybersecurity perspectives, the types and impact of failure, and the latest thinking in mitigation strategy."

— **Tom Longstaff**, Chair, Computer Science, Cybersecurity, and Information Systems Engineering Programs, The Johns Hopkins University Engineering for Professionals

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"Goes straight to the heart of very real operational problems that undermine current defensive capabilities and strategies [and] encourages the reader to think more carefully about the kinds of strategic design and planning that is so often lacking in building sustainable, evolvable, and comprehensive cyber protections."

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Available August 2018

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