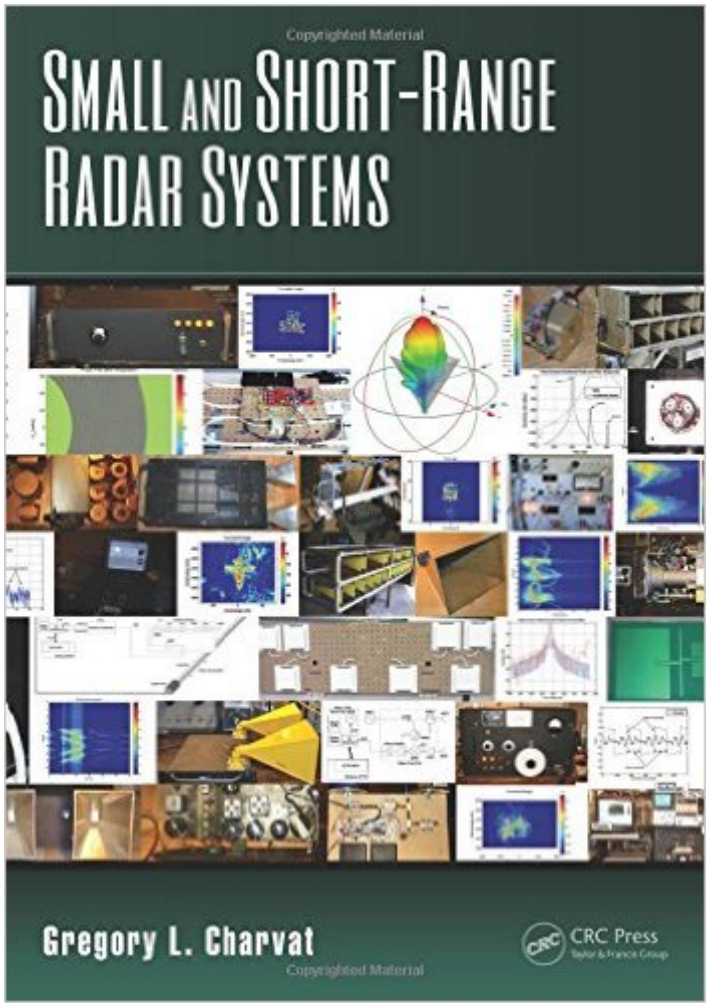
Small And Short-Range Radar Systems (Modern And Practical Approaches To Electrical Engineering)



Synopsis

Radar Expert, Esteemed Author Gregory L. Charvat on CNN and CBS Author Gregory L. Charvat appeared on CNN on March 17, 2014 to discuss whether Malaysia Airlines Flight 370 might have literally flown below the radar. He appeared again on CNN on March 20, 2014 to explain the basics of radar, and he explored the hope and limitations of the technology involved in the search for Flight 370 on CBS on March 22, 2014. Get His Book Now Coupling theory with reality, from derivation to implementation of actual radar systems, Small and Short-Range Radar Systems analyzes and then provides design procedures and working design examples of small and short-range radar systems. Discussing applications from automotive to through-wall imaging, autonomous vehicle, and beyond, the practical text supplies high-level descriptions, theoretical derrivations, back-of-envelope calculations, explanations of processing algorithms, and case studies for each type of small radar system covered, including continuous wave (CW), ultrawideband (UWB) impulse, linear frequency modulation (FM), linear rail synthetic aperture radar (SAR), and phased array. This essential reference: Explains how to design your own radar devices Demonstrates how to process data from small radar sensors Provides real-world, measured radar data to test algorithms before investing development time Complete with downloadable MATLABÂ® scripts and actual radar measurements, Small and Short-Range Radar Systems empowers you to rapidly develop small radar technology for your application.

Book Information

Series: Modern and Practical Approaches to Electrical Engineering (Book 1)
Hardcover: 427 pages
Publisher: CRC Press; 1 edition (April 4, 2014)
Language: English
ISBN-10: 143986599X
ISBN-13: 978-1439865996
Product Dimensions: 1 x 6.5 x 9.5 inches
Shipping Weight: 1.8 pounds (View shipping rates and policies)
Average Customer Review: 5.0 out of 5 starsÂ Â See all reviewsÂ (3 customer reviews)
Best Sellers Rank: #623,484 in Books (See Top 100 in Books) #38 inÂ Books > Engineering & Transportation > Engineering > Telecommunications & Sensors > Radar #53 inÂ Books > Engineering & Transportation > Engineering > Telecommunications & Sensors > Microwaves #133 inÂ Books > Computers & Technology > Graphics & Design > Computer Modelling > Remote

Sensing & GIS

Customer Reviews

This book is unique in its hands on approach, with instructions and bills of material for numerous radar projects. It is very broad in scope and is a valuable addition to any wireless engineer’s library.

I had been looking forward to getting this book since assembling the FMCW circuit described on the MIT Opencoursewareweb site. An excellent and rigorous complement to the online material, this book is a must-have for RADARexperimenters. Beyond the basic theoretical introduction, the practical demonstration of the signal processingconcepts is mandatory for acquiring an in-depth understanding of the physical processes involved in RADARtarget detection.

It covers what it says although there are some confusing typos that should have been edited that require an understanding of what the author is trying to say rather than what is printed

Systems Engineering) Engineering a Safer World: Systems Thinking Applied to Safety (Engineering Systems) The Science and Engineering of Microelectronic Fabrication (The Oxford Series in Electrical and Computer Engineering) Fabrication Engineering at the Micro- and Nanoscale (The Oxford Series in Electrical and Computer Engineering)