Suggested Reading

Contents

- 1 Blogs, Websites, and on-line Books
- 2 Textbooks
  - 2.1 Digital Wireless Communications
  - 2.2 Digital Signal Processing (DSP)
  - 2.3 Software Defined Radio (SDR)
  - 2.4 Radio Frequency (RF) Electronics/Systems
  - 2.5 Amateur Radio and ARRL
- 3 Academic and Conference Papers

- "Wireless Pi" Blog by Dr Qasim Chaudhari
- "The Scientist and Engineer's Guide to DSP" (free book)
- "Complex to Real" Blog
- "DSP Related" Blog
- "Mathematics of the DFT" (free book)
- "Introduction to Digital Filters" (free book)
- NI Application Note "What is I/Q Data?"
- "Quadrature Signals: Complex, But Not Complicated" by Richard Lyons
- "Quadrature Signals: Complex, But Not Complicated" by Richard Lyons
- Free SDR Book from The MathWorks
- GNU Radio Suggested Reading

- Guide to Wireless Communications (3rd Edition) by Jorge Olenewa

  https://www.amazon.com/Guide-Wireless-Communications-Jorge-Olenewa/dp/1111307318/

- Wireless Communications: Principles and Practice (2nd Edition) by Theodore S. Rappaport

  https://www.amazon.com/Wireless-Communications-Principles-Practice-2nd/dp/0130422320/

- Wireless Communications from the Ground Up: An SDR Perspective (2nd Edition) by Qasim Chaudhari

  https://wirelesspi.com/
  https://wirelesspi.com/book/
  https://www.amazon.com/gp/product/1729732232/

- Digital Communications: Fundamentals and Applications (2nd Edition) by Bernard Sklar

  https://www.amazon.com/Digital-Communications-Fundamentals-Applications-2nd/dp/0130847887/

- Digital Communications (5th Edition) by John Proakis, Masoud Salehi

  https://www.amazon.com/Digital-Communications-5th-John-Proakis/dp/0072957166/

- Digital and Analog Communication Systems (8th Edition) by Leon W. Couch

  https://www.amazon.com/Digital-Analog-Communication-Systems-8th/dp/0132915383/

- Digital Communication Systems Engineering with Software-Defined Radio by Alexander Wyglinski, Di Pu

  https://www.amazon.com/Digital-Communication-Engineering-Software-Defined-Communications/dp/1608075257/

- Cognitive Radio Communications and Networks: Principles and Practice by Alexander Wyglinski, Maziar Nekovee, Thomas Hou

  https://www.amazon.com/Cognitive-Radio-Communications-Networks-Principles/dp/0123747155/

- Modern Digital and Analog Communication Systems (4th Edition) by B. P. Lathi,? Zhi Ding

  https://www.amazon.com/Digital-Communication-Electrical-Computer-Engineering/dp/0195331451/

- Digital Communication (3rd Edition) by John R. Barry, Edward A. Lee, David G. Messerschmitt

  https://www.amazon.com/Digital-Communication-John-R-Barry/dp/0792375483/

- Digital Communications with Emphasis on Data Modems: Theory, Analysis, Design, Simulation, Testing, and Applications by Richard W. Middlestead

  https://www.amazon.com/Digital-Communications-Emphasis-Data-Modems/dp/0470408529/

- Introduction to Analog and Digital Communications (2nd Edition) by Simon Haykin, Michael Moher

  https://www.amazon.com/Introduction-Analog-Digital-Communications/dp/0471432229/

- Wireless Communications (2nd Edition) by Andreas F. Molisch

  https://www.amazon.com/Wireless-Communications-Andreas-F-Molisch/dp/0470741864/

- Introduction to Wireless Digital Communication: A Signal Processing Perspective by Robert W. Heath Jr.

  https://www.amazon.com/Introduction-Wireless-Digital-Communication-Perspective/dp/0134431790/

- Communications Receivers: Principles and Design (4th Edition) by Ulrich L. Rohde, Jerry C. Whitaker, Hans Zahnd

  https://www.amazon.com/Communications-Receivers-Principles-Design-Fourth/dp/0071843337/

- Synchronization in Digital Communication Systems by Fuyun Ling, John Proakis

  https://www.amazon.com/Synchronization-Digital-Communication-Systems-Fuyun/dp/110711473X/

- Understanding Digital Signal Processing (3rd Edition) by Richard G. Lyons

  https://www.amazon.com/Understanding-Digital-Signal-Processing-3rd/dp/0137027419/

- Discrete-Time Signal Processing (3rd Edition) by Alan V. Oppenheim, Ronald W. Schafer

  https://www.amazon.com/Discrete-Time-Signal-Processing-3rd-Prentice-Hall/dp/0131988425/

- Digital Signal Processing (4th Edition) by John G. Proakis, Dimitris K Manolakis

  https://www.amazon.com/Digital-Signal-Processing-John-Proakis/dp/0131873741/

- Digital Signal Processing in Modern Communication Systems by Andreas Schwarzinger

  https://www.amazon.com/Digital-Signal-Processing-Communication-Systems/dp/0988873508/

- Digital Signal Processing 101: Everything You Need to Know to Get Started (2nd Edition) by Michael Parker

  https://www.amazon.com/Digital-Signal-Processing-101-Second/dp/0128114533/

- Think DSP: Digital Signal Processing in Python by Allen B. Downey

  https://www.amazon.com/Think-DSP-Digital-Signal-Processing/dp/1491938455/

- Software-Defined Radio for Engineers by Travis F. Collins, Robin Getz, Di Pu, and Alexander M. Wyglinski

  https://www.analog.com/en/education/education-library/software-defined-radio-for-engineers.html

- Software Receiver Design: Build your Own Digital Communication System in Five Easy Steps by C. Richard Johnson Jr, William A. Sethares, Andrew G. Klein

  https://www.amazon.com/Software-Receiver-Design-Digital-Communication/dp/0521189446/

- Software Defined Radio using MATLAB & Simulink and the RTL-SDR by Robert W Stewart, Kenneth W Barlee, Dale S W Atkinson

  http://www.desktopsdr.com/
  https://www.amazon.com/Software-Defined-MATLAB-Simulink-RTL-SDR/dp/0992978718/

- RF Microelectronics (2nd Edition) by Behzad Razavi

  https://www.amazon.com/Microelectronics-Communications-Engineering-Technologies-Rappaport/dp/0137134738/

- Wireless Receiver Design for Digital Communications (2nd Edition) by Kevin McClaning

  https://www.amazon.com/Wireless-Receiver-Digital-Communications-Telecommunications/dp/1891121804/

- Microwave and RF Design of Wireless Systems by David M. Pozar

  https://www.amazon.com/Microwave-Rf-Design-Wireless-Systems/dp/0471322822/

- The ARRL 2018 Handbook for Radio Communications

  http://www.arrl.org/arrl-handbook-2018
  https://www.amazon.com/ARRL-Handbook-Radio-Communications-Softcover/dp/1625950713/
  https://www.amazon.com/ARRL-Handbook-Radio-Communications-Hardcover/dp/1625950721/

- Software Defined Radio: for Amateur Radio Operators and Short Wave Listeners by Andrew Barron

  https://www.amazon.com/Software-Defined-Radio-Operators-Listeners/dp/1534992421/

- An Introduction to HF Software Defined Radio: SDR for Amateur Radio Operators by Andrew Barron ZL3DW

  https://www.amazon.com/introduction-Software-Defined-Radio-Operators/dp/1500119938/

- Spectrum Sensing on LTE Femtocells for GSM Spectrum Re-Farming Using Xilinx FPGAs
- Ship Detection with DVB-T Software Defined Passive Radar
- https://wiki.gnuradio.org/index.php/AcademicPapers
- http://ieeexplore.ieee.org/Xplore/home.jsp