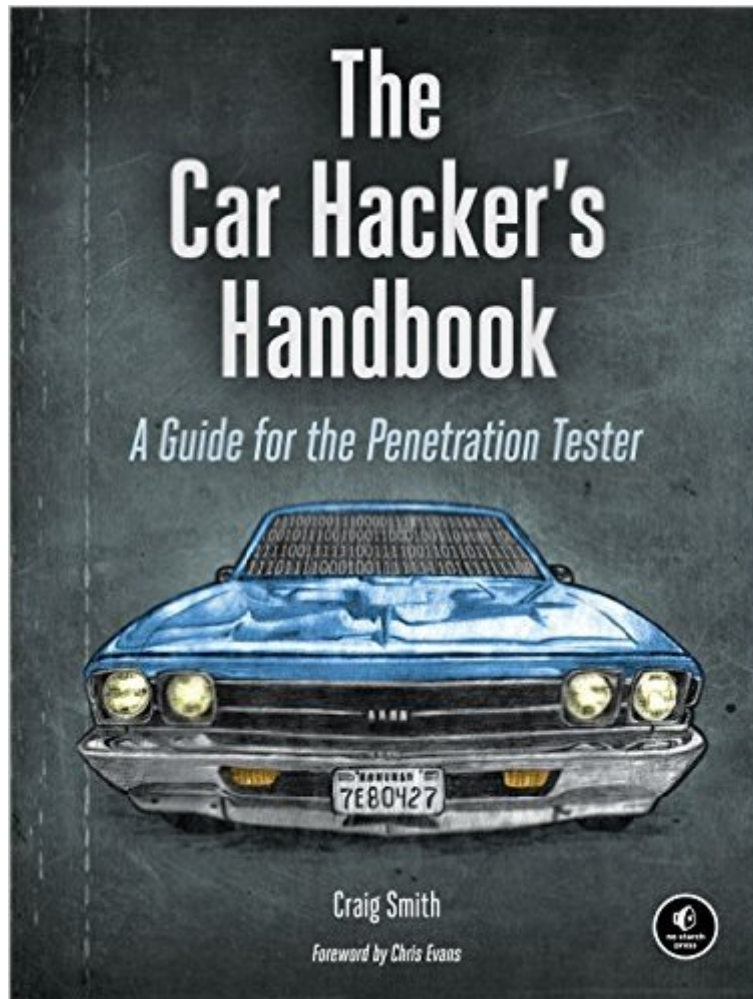# The Car Hacker's Handbook: A Guide For The Penetration Tester

Synopsis

Modern cars are more computerized than ever. Infotainment and navigation systems, Wi-Fi, automatic software updates, and other innovations aim to make driving more convenient. But vehicle technologies haven't kept pace with today's more hostile security environment, leaving millions vulnerable to attack.The Car Hacker's Handbook will give you a deeper understanding of the computer systems and embedded software in modern vehicles. It begins by examining vulnerabilities and providing detailed explanations of communications over the CAN bus and between devices and systems.Then, once you have an understanding of a vehicle's communication network, you'll learn how to intercept data and perform specific hacks to track vehicles, unlock doors, glitch engines, flood communication, and more. With a focus on low-cost, open source hacking tools such as Metasploit, Wireshark, Kayak, can-utils, and ChipWhisperer, The Car Hacker's Handbook will show you how to:Build an accurate threat model for your vehicleReverse engineer the CAN bus to fake engine signalsExploit vulnerabilities in diagnostic and data-logging systemsHack the ECU and other firmware and embedded systemsFeed exploits through infotainment and vehicle-to-vehicle communication systemsOverride factory settings with performance-tuning techniquesBuild physical and virtual test benches to try out exploits safelyIf you're curious about automotive security and have the urge to hack a two-ton computer, make The Car Hacker's Handbook your first stop.

Book Information

Paperback: 304 pages

Publisher: No Starch Press; 1 edition (March 6, 2016)

Language: English

ISBN-10: 1593277032

ISBN-13: 978-1593277031

Product Dimensions: 7 x 0.6 x 9.2 inches

Shipping Weight: 1.2 pounds (View shipping rates and policies)

Average Customer Review: 4.1 out of 5 stars Â Â See all reviewsÂ (23 customer reviews)

Best Sellers Rank: #107,766 in Books (See Top 100 in Books)   #11 inÂ Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electric Machinery & Motors   #21 inÂ Books > Engineering & Transportation > Automotive > Repair & Maintenance > Testing & Certification   #83 inÂ Books > Engineering & Transportation > Engineering > Electrical & Electronics > Circuits

Customer Reviews

The history of technology is replete with instances of security researchers finding a flaw in a product. The vendors then discount the issue and mock the findings; saying itâ ™s only a theoretical vulnerability. They may even resort to suing the researchers. When the vulnerability becomes widespread, these vendors then run to patch their insecure product.We are in that situation now with vulnerabilities around automobile systems. While researchers have been sued and their findings removed from public view, itâ ™s only a matter of time until there will be widespread hacks against car systems.In the just released The Car Hacker's Handbook: A Guide for the Penetration Tester, author Craig Smith has written a fascinating book about how connected cars work, and how they can be hacked. The book provides a substantial amount of information about the applications and embedded software that runs the vehicle.If conference titles are any sort of indicator of the importance of an issue, the recent 2016 RSA Security conference shows the importance of automobile security. The following presentations around auto security were given:â ¢ Collision Investigator: Aftermath of the Auto Hacks (given by author Craig Smith)â ¢ Braking the Connected Car: The Future of Vehicle Vulnerabilitiesâ ¢ Do We Need Cyber-Ratings for the Auto Industry?â ¢ Automobiles are Getting Hacked: Whatâ ™s Next for Transportation Security?Adding to the issue is that last week the FBI issued a public service announcement that motor vehicles are increasingly vulnerable to remote exploits. Last week also saw a Tesla Model S hacking keynote during the CeBIT conference.This is a truly fascinating book showing how connected cars are vulnerable due to poorly written software.

Download to continue reading...

The Car Hacker's Handbook: A Guide for the Penetration Tester Metasploit: The Penetration Tester's Guide The Hacker's Briefcase (Hacker Magazine Book 1) Hacking: Beginner's Guide to Computer Hacking, Basic Security, Penetration Testing (Hacking, How to Hack, Penetration Testing, Basic security, Computer Hacking) Hacking: How to Hack Computers, Basic Security and Penetration Testing (Hacking, How to Hack, Hacking for Dummies, Computer Hacking, penetration testing, basic security, arduino, python) Hacking: Basic Security, Penetration Testing and How to Hack (hacking, how to hack, penetration testing, basic security, arduino, python, engineering) The Basics of Hacking and Penetration Testing: Ethical Hacking and Penetration Testing Made Easy The Basics of Hacking and Penetration Testing: Ethical Hacking and Penetration Testing Made Easy (Syngress Basics Series) D.I.Y. - Detail It Yourself: The Car Enthusiast's Guide to a Fantastic Looking Car TAKARA TOMY Tomica Hyper Rescue HR04 Light Car (0/48) Diecast Toy Car The

American Railroad Freight Car: From the Wood-Car Era to the Coming of Steel Chilton Total Car Care Chrysler PT Cruiser, 2001-2010 Repair Manual (Chilton's Total Car Care Repair Manuals) Car Talk: 25 Years of Lousy Car Advice Software Test Engineering with IBM Rational Functional Tester: The Definitive Resource The Web Application Hacker's Handbook: Finding and Exploiting Security Flaws Gray Hat Hacking The Ethical Hacker's Handbook, Fourth Edition Hacking University: Freshman Edition Essential Beginner's Guide on How to Become an Amateur Hacker (Hacking, How to Hack, Hacking for Beginners, Computer ... (Hacking Freedom and Data Driven Book 1) Certified Ethical Hacker (CEH) Cert Guide XDA Developers' Android Hacker's Toolkit: The Complete Guide to Rooting, ROMs and Theming Maximum Linux Security: A Hacker's Guide to Protecting Your Linux Server and Workstation