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features -- Chapter 9: Introduction to functional safety and cybersecurity testing -- Chapter 10: Verification and validation strategy Chapter 11: Acceptance criteria and maturity evaluation -- Chapter 12: Data flow and management in automated driving -- Chapter 13: Challenges and gaps in testing automated driving features -- Index -- About the author.

Sommario/riassunto

The day will soon come when you will be able to verbally communicate with a vehicle and instruct it to drive to a location. The car will navigate through street traffic and take you to your destination without additional instruction or effort on your part. Today, this scenario is still in the future, but the automotive industry is racing to toward the finish line to have automated driving vehicles deployed on our roads. ADAS and Automated Driving: A Practical Approach to Verification and Validation focuses on how automated driving systems (ADS) can be developed from concept to a product on the market for widescale public use. It covers practically viable approaches, methods, and techniques with examples from multiple production programs across different organizations. The author provides an overview of the various Advanced Driver Assistance Systems (ADAS) and ADS currently being developed and installed in vehicles. The technology needed for large-scale production and public use of fully autonomous vehicles is still under development, and the creation of such technology is a highly innovative area of the automotive industry. This text is a comprehensive reference for anyone interested in a career focused on the verification and validation of ADAS and ADS. The examples included in the volume provide the reader foundational knowledge and follow best and proven practices from the industry. Using the information in ADAS and Automated Driving, you can kick start your career in the field of ADAS and ADS.