## Mitsubishi Engine Ecu Pinout

You definitely want to have a good guide on everything you need to succeed in the trucking business industry. This book will keep you out of trouble in all facets trucking business. The trucking industry has the luxury of being able to recover from small miscues, but not many of books out there go the the length this book goes to discuss matters Trucking. In this book you'll learn.! • Define The Role Of The Broker And Agent • Here's How The Industry Works • Why Get Operating Authority • Financial • Shipping Own Product • More Home Time • Region And Customers • The Money In Trucking • Abide By The Industry's Standards • Satisfy The Steps To Become An Agent • Understand The Industry's Work Environment • Familiarize Yourself With Industry Terms • Build The Steps To Become A Broker • Consider The Big Picture • What You Can Expect • Mechanical Problems • Regulatory Problems • Financial Problems • Communication Problems • What To Spend (Or Not Spend) Money On • Good Investments • Bad Investments • Step Nine Discover Self Pace & Time Management Success About the Expert Bruce Stimson started his factoring career in 2001, when he founded QLFS, which eventually became the Invoice Trucking Group. Mr. Stimson led the firm through its initial growth and established it as a leading provider to startups and small companies in the New England region. After QLFS, Mr. Stimson launched Trucking Capital LLC to provide services in the USA, Canada and Australia. Under his leadership, Trucking Capital LLC has expanded to offer a number of business finance products and can help companies in most industries. Trucking Capital LLC is one of the few companies that offers micro-factoring (also called small-ticket factoring), which helps early-stage companies with limited revenues. Small business factoring has been ignored by larger factoring firms and banks, establishing Mr. Terry as a pioneer in this market. Before starting his career in finance, Mr. Stimson held several management positions in operations and marketing in the telecommunications industry for eight years. He earned a Master's Degree in Finance with a concentration in banking. HowExpert publishes quick 'how to' guides on all topics from A to Z by everyday experts.

With the increasing popularity of GM's LS-series engine family, many enthusiasts are ready to rebuild. The first of its kind, How to Rebuild GM LS-Series Engines, tells you exactly how to do that. The book explains variations between the various LS-series engines and elaborates up on the features that make this engine family such an excellent design. As with all Workbench titles, this book details and highlights special components, tools, chemicals, and other accessories needed to get the job done right, the first time. Appendicies are packed full of valuable reference information, and the book includes a Work-Along Sheet to help you record vital statistics and measurements along the way. Updated to reflect the latest technology in the automotive industry, this book will provide the knowledge and skills needed to successfully inspect, maintain, and repair vehicles of all makes and models. Automotive Service: Inspection, Maintenance, and Repair, 3E begins by introducing readers to a number of automotive career options, shop management basics, plus necessary tools and equipment. The book then progresses to the theories of vehicle systems operations and includes step-by-step procedures for troubleshooting and repairing all major systems of the modern automobile. Updates include coverage of new vehicle technology like EVAP systems, on-board diagnostics and emissions, alternative fuels, and hybrid vehicles, making this book not only comprehensive but also current so that readers can feel confident they are learning the very latest in industry trends and techniques.

We've assembled seven of the greatest minds in modern JavaScript to teach you the most inspirational techniques you'll ever use. From creating impressive mashups and stunning, dynamic graphics, to more subtle user-experience enhancements, you're about to be amazed by the true potential of this powerful language. With an all star line-up of authors including James Edwards, Michael Mahemoff, Ara Pehlivanian, Cameron Adams, Dan Webb, Christian Heilmann, and Simon Willison, this superb book will show you how to: Create a slick Google Maps and Flickr mashup. Build your own fully accessible 3D maze. Create stunning vector graphics using the canvas element. Have some fun with draggable and sortable table columns. Give your site some extra personality with client-side badges. Write better code faster using metaprogramming techniques. Become a debugging expert using pro-level Firebug tricks. Presented in full color, all of the books solutions are cross-browser and cross-platform compatible. Best of all, all the code used in the book is available for you to download and experiment with. Who Should Read This Book? This book is targeted at intermediate JavaScript developers who want to take their JavaScript skills to the next level without sacrificing web accessibility or best practice. If you have even a small amount of experience with JavaScript, and are comfortable enough programming in another language such as PHP or Java, you'll be just fine - we'll hold your hand along the way, and all of the code is available for you to download and experiment with on your own.

Simple advice to help you to become a safe, competent and confident driver

Overall fuel economy trends have prompted some energy conservationists and environmentalists to call for increasing the Corp. Avg. Fuel Economy (CAFE) standards. Those supporting an increase in the standards often cite energy security and environmental benefits that would result from improved fuel economy. Those opposed to raising the standards often cite decreased auto safety, which they contend could result from producing smaller, more fuel-efficient vehicles. This report has reviewed studies and interviewed experts to identify: the impact of increasing CAFE standards on oil consumption, the environ., and auto safety in the U.S.; and other issues that affect the CAFE.

Emma Karas was raised in Japan; it's the country she calls home. But when her mother is diagnosed with breast cancer, Emma's family moves to a town outside Lowell, Massachusetts, to stay with Emma's grandmother while her mom undergoes treatment. Emma feels out of place in the United States. She begins to have migraines, and longs to be back in Japan. At her grandmother's urging, she volunteers in a long-term care center to help Zena, a patient with locked-in syndrome, write down her poems. There, Emma meets Samnang, another volunteer, who assists elderly Cambodian refugees. Weekly visits to the care center, Zena's poems, dance, and noodle soup bring Emma and Samnang closer,

until Emma must make a painful choice: stay in Massachusetts, or return home early to Japan.

This textbook will help you learn all the skills you need to pass all Vehicle Electrical and Electronic Systems courses and qualifications. As electrical and electronic systems become increasingly more complex and fundamental to the workings of modern vehicles, understanding these systems is essential for automotive technicians. For students new to the subject, this book will help to develop this knowledge, but will also assist experienced technicians in keeping up with recent technological advances. This new edition includes information on developments in pass-through technology, multiplexing, and engine control systems. In full colour and covering the latest course specifications, this is the guide that no student enrolled on an automotive maintenance and repair course should be without. Designed to make learning easier, this book contains: Photographs, flow charts, quick reference tables, overview descriptions and step-by-step instructions. Case studies to help you put the principles covered into a real-life context. Useful margin features throughout, including definitions, key facts and 'safety first' considerations.

Automotive Automatic Transmission and Transaxles, published as part of the CDX Master Automotive Technician Series, provides students with an in-depth introduction to diagnosing, repairing, and rebuilding transmissions of all types. Utilizing a "strategy-based diagnostics" approach, this book helps students master technical trouble-shooting in order to address the problem correctly on the first attempt. In How to Rebuild and Modify Ford C4 and C6 Automatic Transmissions, author George Reid walks readers through the process step-by-step, from removing the transmission, to complete overhaul, to proper re-installation and road testing.

Do You Want to Ace Your Commercial Driver's License Test? Now You Can With the Help of This CDL Study Guide. Would you like to prepare yourself for any question on the CDL test and have a perfect test score? If you don't have much time on your hands for studying or if you are a terrible test taker, or even if you have trouble absorbing a lot of information, you don't have to worry at all. This CDL study guide will help you with any problem you may have so that you can have a perfect score on the CDL test. Many other CDL study guides on the market will offer you only plain content without any extra guidelines. On the other hand, this guide will provide you with everything you need to know to pass the Commercial Driver's License exam. This book has it all - from sample questions, FAQs, and keywords to proven expert strategies for studying and taking exams. The guides are easy to understand and concise - perfect for beginners or people who don't have much time to study. Here's what this CDL study guide can offer you: Way to absorb a lot of information quickly and easily through comprehensive but straightforward guides Extensive list of CDL practice tests with thoroughly reviewed and explained answers Expert test-taking strategies that are guaranteed to bring perfect results Top test-taking tips through which you will earn how to avoid even the smallest mistakes people make when taking the CDL test Detailed preparation guides which guarantee success And much more! Even if you don't have much time on your have trouble studying, this beginner's CDL study guide will set you on a path to success, and you'll surely ace the test. So what are you waiting for? Scroll up, click on "Buy Now with 1-Click," and Get Your Copy Now!

If your car needs new paint, or even just a touch-up, the cost involved in hiring a professional can be more than you bargained for. Fortunately, there are less expensive alternatives—you can even paint your car at home! In How to Paint Your Car On A Budget, author and veteran DIY hot rodder Pat Ganahl unveils dozens of secrets that will help anyone paint their own car. From simple scuff-and-squirt jobs to fullon, door-jambs-and-everything paint jobs, Ganahl covers everything you need to know to get a great looking coat of paint on your car and save lots of money in the process. This book covers painting equipment, the ins and outs of prep, masking, painting and sanding products and techniques, and real-world advice on how to budget wisely when painting your own car. It's the most practical automotive painting book ever written!

Keith McCord recounts the history of automotive onboard diagnostic systems and creation of the rudimentary OBD I systems and the development as well as the evolution of OBD II. Currently, OBD-II (OnBoard Diagnostic II) is the standard of the industry, and this book provides a thorough explanation of this system. It details its main features, capabilities, and characteristics. It shows how to access the port connector on the car, the serial data protocols, and what the serial data means. To understand the diagnostic codes, the numbering system is defined and the table of common DTCs is shown. But most importantly, McCord provides a thorough process for trouble shooting problems, tracing a problem to its root, explaining why DTCs may not lead to the source of the underlying problem, and ultimately resolving the problem. A definitive guide to the iconic BMW GS, the model that revolutionized the dual-purpose adventure bike in 1980. Combining all-terrain capability, high performance and on-road ride comfort, the GS is the bestselling large-capacity motorcycle in the UK and is still evolving today. Including comprehensive specification details, owners' experiences and previously unseen pictures, BMW GS - The Complete Story covers the original R80G/S and its impact on the industry; design and development of all the updated models; radical engineering concepts and technology; worldwide racing success for the GS and finally, the all-new R1200GS of 2013 and the future of the GS. Superbly illustrated with 196 colour and 8 black & white illustrations, many previously unseen.

The all-new K-series engines are now found in all Honda and Acura performance models, and are also becoming the engine swap of choice. You'll find chapters detailing upgrades to the intake, exhaust, cylinder heads, camshafts, and short block, as well as on how to add turbochargers, superchargers, and nitrous oxide. Don't spend your hard-earned cash figuring out what works and what doesn't--pick up Building Honda K-Series Engine Performance and know for s u r e . & a m p; n b s p; & a m p; n b

To extract maximum performance, an engine needs an efficient, well-designed, and properly tuned exhaust system. In fact, the exhaust system's design, components, and materials have a large impact on the overall performance of the engine. Engine builders and car owners need to carefully consider the exhaust layout, select the parts, and fabricate the exhaust system that delivers the best performance for car and particular application. Master engine builder and award-winning writer Mike Mavrigian explains exhaust system principles, function, and components in clear and concise language. He then details how to design, fabricate, and fit exhaust systems to classic street cars as well as for special and racing applications. Air/exhaust-gas flow dynamics and exhaust system design are explained. Cam duration and overlap are also analyzed to determine how an engine breathes in air/fuel, as the exhaust must efficiently manage this burned mixture. Pipe bending is a science as well as art and you're shown how to effectively crush and mandrel bend exhaust pipe to fit your header/manifold and chassis combination. Header tube diameter and length is taken into account, as well as the most efficient catalytic converters and resonators for achieving your performance goals. In addition, Mavrigian covers the special exhaust system requirements for supercharged and turbocharged systems. When building a high-performance engine, you need a high-performance exhaust system that's tuned and fitted to that engine so you can realize maximum performance. This comprehensive book is your guide to achieving ultimate exhaust system performance. It shows you how to fabricate a system for custom applications and to fit the correct prefabricated system to your car. No other book on the market is solely dedicated to fabricating and fitting an exhaust system in high-performance applications.

Build and modify your 1973-1987 GMC or Chevrolet truck in your garage with step-by-step processes to boost power, add curb appeal, and improve stopping ability, handling, safety, and more. GM's square-body trucks are a solid, simple, and easy-to-find rig--and that makes them perfect for modification. They're American classics, and they've become the hot rods of a new generation. Veteran magazine editor Jim Pickering brings these trucks into focus, taking you through the aspects that make them so popular and modifications you can perform to put a modern spin on their classic looks. He takes an in-depth look at all the major systems in your C10 and covers what can be done to them to turn your classic hauler into the modern hot rod that you want: a truck that's fast, safe, full of curb appeal, and reliable enough to drive whenever and wherever you want. Built in massive numbers during an 18-year production run, these trucks aren't hard to source, but finding

a good starting point and mapping out your plan are important. This book covers a lot of territory: how to find a good starter truck, LS power builds and installs, slammed air suspension and coilover systems, automatic and manual transmission choices (including a 6-speed manual conversion), cooling system upgrades, safely adding a modern alternator to factory GM wiring, modifying a mechanical clutch pedal to use a hydraulic master and slave cylinder, making new fuel lines and brake lines to support fuel injection and big brakes, installing a 4-link rear suspension system, fabricating an under-bed mount to hide air suspension components, building exhaust, adding LED lighting, interior restoration, and more. If you're building a square-body truck that you'd actually like to drive regularly, you've come to the right place. There hasn't ever been a more comprehensive, authoritative look at building a complete truck for street use that includes all the steps required to make it work.

This Bosch Bible fully explains the theory, troubleshooting, and service of all Bosch systems from D-Jetronic through the latest Motronics. Includes high-performance tuning secrets and information on the newest KE- and LH-Motronic systems not available from any other source. The photos in this edition are black and white. Mitsubishi's 4G63t engine is among the most powerful engines ever in the sport-compact world. It's not uncommon to find one of these four-cylinder, iron-block, aluminum-headed, 2-liter turbocharged monsters making more than 1,000 horsepower with the right modifications and tuning - well above the 200-300 hp produced in the factory-made engines. Bolted into such cars as the Mitsubishi Lancer Evolution, Eclipse, and Galant, and the Eagle Talon and Plymouth Laser, the 4G63t has more than a cult following among sport-compact enthusiasts, who know and respect this engine's immense performance potential at the track or on the street. Up until now, in-depth performance information on the 4G63t has been hard to find. For this book, author Robert Bowen went straight to the source, Robert Garcia of Road/Race Engineering in Santa Fe Springs, California. RRE is the most well-known and respected Mitsubishi turbo performance shop in the United States, and Garcia is its in-house engine builder. Mitsubishi enthusiasts will benefit from Garcia's expertise and be able to build better, stronger engines than ever before. "How to Build Max-Performance Mitsubishi 4G63t Engines" covers every system and component of the engine, including the turbocharger system and engine management. More than just a collection of tips and tricks, this book includes a complete history of the engine and its evolution, an identification guide, and advice for choosing engine components and other parts. Profiles of successful built-up engines show the reader examples of what works, and the book includes helpful guidance for choosing your own engine building path.

Introduced in 1997, the GM LS engine has become the dominant V-8 engine in GM vehicles and a top-selling high-performance crate engine. GM has released a wide range of Gen III and IV LS engines that deliver spectacular efficiency and performance. These compact, lightweight, cutting-edge pushrod V-8 engines have become affordable and readily obtainable from a variety of sources. In the process, the LS engine has become the most popular V-8 engine to swap into many American and foreign muscle cars, sports cars, trucks, and passenger cars. To select the best engine for an LS engine swap, you need to carefully consider the application. Veteran author and LS engine swap master Jefferson Bryant reveals all the criteria to consider when choosing an LS engine for a swap project. You are guided through selecting or fabricating motor mounts for the project. Positioning the LS engine in the engine compartment and packaging its equipment is a crucial part of the swap process, which is comprehensively covered. As part of the installation, you need to choose a transmission crossmember that fits the engine and vehicle as well as selecting an oil pan that has the correct profile for the crossmember with adequate ground clearance. Often the brake booster, steering shaft, accessory pulleys, and the exhaust system present clearance challenges, so this book offers you the best options and solutions. In addition, adapting the computer-control system to the wiring harness and vehicle is a crucial aspect for completing the installation, which is thoroughly detailed. As an all-new edition of the original top-selling title, LS Swaps: How to Swap GM LS Engines into Almost Anything covers the right way to do a spectrum of swaps. So, pick up this guide, select your ride, and get started on your next exciting project.

After disassembling and gutting your car, it is easy to feel that you're in way over your head when it comes to the upholstery. This is why so many do-it-yourself restorers outsource the work, at considerable expense, to an experienced upholstery shop. Taking the time to acquire the skills for upholstery restoration may feel like a daunting task, but what if an experienced upholsterer presented every skill you needed to restore upholstery yourself? Starting with a list of necessary tools, author Fred Mattson guides you through all the required tasks, including seat restoration; door panel removal, patterning, assembly, and installation; headliner removal and installation; carpet cutting; and even convertible top restoration. The easy-to-follow step-by-step presentation allows for a thorough understanding of all the processes. Every photo in this book provides a hands-on approach that shows you how to repair and restore a car's interior to concours, show-quality specifications. Other restoration books may show you beautifully restored interiors, but they don't show you how to produce them. This book helps you develop the skills needed with instruction from a professional upholsterer, saving you thousands of dollars over outsourcing the restoration. If you are interested in saving money, doing a complete restoration yourself, or simply want to know how it's done, this book is a handy addition to your automotive library.

The BOSCH handbook series on different automotive technologies has become one of the most definitive sets of reference books that automotive engineers have at their disposal. Different topics are covered in a concise but descriptive way backed up by diagrams, graphs and tables enabling the reader to comprehend the subject matter fully. This book discusses the basics relating to the method of operation of gasoline-engine control systems. The descriptions of cylinder-charge control systems, fuel-injection systems (intake manifold and gasoline direct injection), and ignition systems provide a comprehensive, firsthand overview of the control mechanisms indispensable for operating a modern gasoline engine. The practical implementation of engine management and control is described by the examples of various Motronic variants, and the control and regulation functions integrated in this particular management systems. The book concludes with a chapter describing how a Motronic system is developed. Taking the Commercial Driver's License Test? Do You Want to Ace It? Now You Can With the Help of Official CDL Study Guide. Would you like to: - Become a professional driver, and earn a lot of money? - Have a perfect score on the CDL test? - Be prepared for any question on the test? But you: - Are you a terrible test taker? - Have trouble absorbing a lot of information? - Don't have much time to study? If the answer to any of the questions above is "yes", then you are in for a treat. This official CDL study guide is here to prepare you fully, so you can ace that test and become a professional driver. All the guides you can find inside are written in a simple and easy to digest manner, perfect for beginners or people who don't have much time to study. Here's what this complete guide can offer you: - Smooth study experience: Discover thorough and comprehensive guides that will help you absorb a lot of information quickly and easily. - Tests with full reviews: Use the extensive list of CDL practice tests with thoroughly reviewed and explained answers, so you'll never be unprepared again. - Proven test-taking strategies: Discover the easiest way to ace the CDL test with expert test-taking strategies. - Top test-taking tips: Learn how to avoid even the smallest mistakes people make when taking the CDL test so that you can ensure the perfect score. Even if you are a terrible test taker or have trouble studying, these complete beginners guide for taking the CDL test will help you succeed. So follow these detailed prep guides, set yourself on a path to success, and ace that test! Scroll up, click on "Buy Now" and Get Your Copy Now! How to Rebuild and Modify Ford C4 and C6 Automatic TransmissionsCarTech Inc

Tara, Mag-Tagalog Tayo! Come On, Let's Speak Tagalog! Elementary Tagalog's comprehensive approach will help students

master basic Tagalog (Filipino) without frustration. From learning to read Tagalog words and pronounce its sounds to using correct grammar, communicating in dialogues and building vocabulary, learners will be surprised at how quickly their skills in Tagalog language develop. The expert guidance in Elementary Tagalog is carefully sequenced to be the most effective and supportive for beginners and really helps students learn Tagalog. Covering a range of topics, the lessons center on themes from the family, the home, and the community to food, travel, health, leisure time, festivals and popular culture. There are plenty of exercises, activities and practice drills to help learners acquire and master the language fundamentals, while culture notes explore the diversity, heritage and history of the Philippines. The Elementary Tagalog Workbook is a helpful companion to the textbook and will assist you in practicing and polishing your skills. Each lesson supplements the corresponding lesson in the textbook. There are ten activities per lesson, which offer a range of exercises and practice opportunities to enable you to achieve proficiency in everyday, conversational Tagalog.

The light-duty vehicle fleet is expected to undergo substantial technological changes over the next several decades. New powertrain designs, alternative fuels, advanced materials and significant changes to the vehicle body are being driven by increasingly stringent fuel economy and greenhouse gas emission standards. By the end of the next decade, cars and light-duty trucks will be more fuel efficient, weigh less, emit less air pollutants, have more safety features, and will be more expensive to purchase relative to current vehicles. Though the gasoline-powered spark ignition engine will continue to be the dominant powertrain configuration even through 2030, such vehicles will be equipped with advanced technologies, materials, electronics and controls, and aerodynamics. And by 2030, the deployment of alternative methods to propel and fuel vehicles and alternative modes of transportation, including autonomous vehicles, will be well underway. What are these new technologies - how will they work, and will some technologies be more effective than others? Written to inform The United States Department of Transportation's National Highway Traffic Safety Administration (NHTSA) and Environmental Protection Agency (EPA) Corporate Average Fuel Economy (CAFE) and greenhouse gas (GHG) emission standards, this new report from the National Research Council is a technical evaluation of costs, benefits, and implementation issues of fuel reduction technologies for next-generation light-duty vehicles. Cost, Effectiveness, and Deployment of Fuel Economy Technologies for Light-Duty Vehicles estimates the cost, potential efficiency improvements, and barriers to commercial deployment of technologies that might be employed from 2020 to 2030. This report describes these promising technologies and makes recommendations for their inclusion on the list of technologies applicable for the 2017-2025 CAFE standards.

Countless collector car owners are skilled at performing mechanical work, but for many of them, electrical work seems like a black art, too complicated and too confusing. However, electrical upgrades are absolutely essential for a high-performance classic car or a modified car to perform at its best. With a firm understanding of the fundamentals, you can take this comprehensive guide and complete a wide range of electrical projects that enhance the performance and functionality of a vehicle. In this revised edition (formerly titled Automotive Electrical Performance Projects) brilliant color photos and explanatory step-by-step captions detail the installation of the most popular, functional, and beneficial upgrades for enthusiasts of varying skill levels. Just a few of the projects included are: maximizing performance of electric fans; installing electronic gauges; upgrading charging systems; and installing a complete aftermarket wiring harness, which is no small task. Each facet is covered in amazing detail. Veteran author Tony Candela, who wrote CarTech's previous best-selling title Automotive Wiring and Electrical Systems, moves beyond the theoretical and into real-world applications with this exciting and detailed follow-up. This Volume 2 is essential for any enthusiast looking to upgrade his or her classic vehicle to modern standards, and for putting all the knowledge learned in Automotive Wiring and Electrical Systems into practice.

Beginner-friendly instructions give you the green light for stitching eight cool cars and trucks complete with moving parts--such as a dump truck that lifts and dumps through a flap that opens and closes. Fun to roll and race, the vehicles are about 13" long and 7" high (including wheels). Make way for speeding crochet! Create a variety of vehicles, including a police car, taxicab, convertible, and school bus Use readily available craft materials to attach wheels that actually turn Find alternative instructions for making huggable stuffies without moving parts for naptime cuddling

When it comes to their personal transportation, today's youth have shunned the large, heavy performance cars of their parents' generation and instead embraced what has become known as the "sport compact"--smaller, lightweight, modern sports cars of predominantly Japanese manufacture. These cars respond well to performance modifications due to their light weight and technology-laden, high-revving engines. And by far, the most sought-after and modified cars are the Hondas and Acuras of the mid-'80s to the present. An extremely popular method of improving vehicle performance is a process known as engine swapping. Engine swapping consists of removing a more powerful engine from a better-equipped or more modern vehicle and installing it into your own. It is one of the most efficient and affordable methods of improving your vehicle's performance. This book covers in detail all the most popular performance swaps for Honda Civic, Accord, and Prelude as well as the Acura Integra. It includes vital information on electrics, fit, and drivetrain compatibility, design considerations, step-by-step instruction, and costs. This book is must-have for the Honda enthusiast.

Reviews topics covered on the exam, offers test taking tips, and includes six practice exams.

This revised and updated color edition of How to Rebuild the Small-Block Ford walks you step by step through a rebuild, including: planning your rebuild, disassembly and inspection, choosing the right parts, machine work, assembling your engine, and first firing and break-in.

A guide to modifying and tuning modern electronic fuel injection (EFI) and electronic control unit (ECU) systems. Includes sections on standalones, an overview of EFI systems components and basic operation, and much more.

"The past few years witnessed a major revolution in the area of unmanned aerial vehicles (UAVs), commonly known as drones, due to significant technological advances across various drone-related fields ranging from embedded systems to autonomy, control, security, and communications. These unprecedented recent advances in UAV technology have made it possible to widely deploy drones across a plethora of application domains ranging from delivery of goods to surveillance, environmental monitoring, track control, remote sensing, and search and rescue. In fact, recent reports from the Federal Aviation Administration (FAA) anticipate that sales of UAVs may exceed 7 million in 2020 and many industries are currently investing in innovative drone-centric applications and research. To enable all such applications, it is imperative to address a plethora of research challenges pertaining to drone systems, ranging from navigation to autonomy, control, sensing, navigation, and communications. In particular, the deployment of UAVs in tomorrow's smart cities, is largely contingent upon equipping them with effective means for

communications and networking. To this end, in this book, we provide a comprehensive treatment of the wireless communications and networking research challenges and opportunities associated with UAV technology. This treatment begins in this chapter which provides an introduction to UAV technology and an in-depth discussion on the wireless communication and networking challenges associated with the introduction of UAVs"--