



Towards a Low-Cost Quadrotor Research Platform

Leon Keith Burkamshaw

Download now

[Click here](#) if your download doesn't start automatically

Towards a Low-Cost Quadrotor Research Platform

Leon Keith Burkamshaw

Towards a Low-Cost Quadrotor Research Platform Leon Keith Burkamshaw

Two aspects of currently available Miniature UAVs (MUAVs) that limit the adoption of this technology for civil and research purposes are the high cost and closed design philosophy. This thesis attempts to solve these problems by presenting an open source design that is focused on low-cost, while maintaining a reasonable level of performance. The use of Commercial Off-The-Shelf (COTS) equipment is maximized where possible to reduce development time and cost. A novel approach used by this design is the use of a Nintendo Wii MotionPlus device as an Inertial Measurement Unit (IMU). This mass produced COTS part provides a three degree of freedom IMU for minimal cost. All software is of a modular design to ease understanding and facilitate improvements. To reduce development time, and to help discover requirements, a Rapid Application Development (RAD) methodology has been adopted that is suitable for implementation by a single developer. Software prototypes are constructed and iteratively built upon to discover more requirements. At the completion of each phase, testing is performed. Once a suitable level of maturity has been reached, the software prototype is rolled into the main build. Flight-testing is performed at the completion of the design along with a quantitative measure of flight stability.

 [Download Towards a Low-Cost Quadrotor Research Platform ...pdf](#)

 [Read Online Towards a Low-Cost Quadrotor Research Platform ...pdf](#)

Download and Read Free Online Towards a Low-Cost Quadrotor Research Platform Leon Keith Burkamshaw

From reader reviews:

Anthony Flowers:

Do you have favorite book? Should you have, what is your favorite's book? E-book is very important thing for us to learn everything in the world. Each e-book has different aim or perhaps goal; it means that e-book has different type. Some people truly feel enjoy to spend their a chance to read a book. These are reading whatever they get because their hobby is usually reading a book. Think about the person who don't like reading through a book? Sometime, man or woman feel need book if they found difficult problem or maybe exercise. Well, probably you will need this Towards a Low-Cost Quadrotor Research Platform.

Ronald Ybarra:

Now a day people that Living in the era wherever everything reachable by match the internet and the resources inside it can be true or not require people to be aware of each information they get. How a lot more to be smart in acquiring any information nowadays? Of course the answer then is reading a book. Looking at a book can help men and women out of this uncertainty Information specially this Towards a Low-Cost Quadrotor Research Platform book because book offers you rich info and knowledge. Of course the info in this book hundred % guarantees there is no doubt in it as you know.

Ariane Swanson:

Often the book Towards a Low-Cost Quadrotor Research Platform will bring you to the new experience of reading the book. The author style to elucidate the idea is very unique. In the event you try to find new book to read, this book very ideal to you. The book Towards a Low-Cost Quadrotor Research Platform is much recommended to you to read. You can also get the e-book in the official web site, so you can more readily to read the book.

Jerry Bonner:

Are you kind of hectic person, only have 10 as well as 15 minute in your day to upgrading your mind skill or thinking skill possibly analytical thinking? Then you are receiving problem with the book than can satisfy your short time to read it because this all time you only find guide that need more time to be examine. Towards a Low-Cost Quadrotor Research Platform can be your answer given it can be read by you actually who have those short free time problems.

Download and Read Online Towards a Low-Cost Quadrotor

Research Platform Leon Keith Burkamshaw #8SD4MZB5RFY

Read Towards a Low-Cost Quadrotor Research Platform by Leon Keith Burkamshaw for online ebook

Towards a Low-Cost Quadrotor Research Platform by Leon Keith Burkamshaw Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Towards a Low-Cost Quadrotor Research Platform by Leon Keith Burkamshaw books to read online.

Online Towards a Low-Cost Quadrotor Research Platform by Leon Keith Burkamshaw ebook PDF download

Towards a Low-Cost Quadrotor Research Platform by Leon Keith Burkamshaw Doc

Towards a Low-Cost Quadrotor Research Platform by Leon Keith Burkamshaw Mobipocket

Towards a Low-Cost Quadrotor Research Platform by Leon Keith Burkamshaw EPub