



Geometric Control of Mechanical Systems

By Bullo, Francesco / Lewis, Andrew D.

Book Condition: New. Publisher/Verlag: Springer, Berlin | Modeling, Analysis, and Design for Simple Mechanical Control Systems | The area of analysis and control of mechanical systems using differential geometry is flourishing. This book collects many results over the last decade and provides a comprehensive introduction to the area. The primary emphasis of this book is the modeling, analysis, and control of mechanical systems. The methods and results presented can be applied to a large class of mechanical control systems, including applications in robotics, autonomous vehicle control, and multi-body systems. The book is unique in that it presents a unified, rather than an inclusive, treatment of control theory for mechanical systems. A distinctive feature of the presentation is its reliance on techniques from differential and Riemannian geometry. The book contains extensive examples and exercises, and will be suitable for a growing number of courses in this area. It begins with the detailed mathematical background, proceeding through innovative approaches to physical modeling, analysis, and design techniques. Numerous examples illustrate the proposed methods and results, while the many exercises test basic knowledge and introduce topics not covered in the main body of the text. The audience of this book consists of two groups. The first..



READ ONLINE
[7.54 MB]

Reviews

If you need to adding benefit, a must buy book. It really is rally interesting through reading through period. Your way of life period will probably be convert as soon as you total looking over this book.

-- Ms. Kirstin O'Kon

Completely among the best pdf I actually have possibly read through. It is probably the most awesome pdf we have read. You wont really feel monotony at whenever you want of your time (that's what catalogs are for about in the event you ask me).

-- Prof. Martine Lesch