



# Learning Autodesk Inventor 2016

By Randy Shih

[Download now](#)

[Read Online](#) 

## Learning Autodesk Inventor 2016 By Randy Shih

This book will teach you everything you need to know to start using Autodesk Inventor 2016 with easy to understand, step-by-step tutorials. This book features a simple robot design used as a project throughout the book. You will learn to model parts, create assemblies, run simulations and even create animations of your robot design. An unassembled version of the same robot used throughout the book can be bundled with the book.

No previous experience with Computer Aided Design(CAD) is needed since this book starts at an introductory level. The author begins by getting you familiar with the Inventor interface and its basic tools. You will start by learning to model simple robot parts and before long you will graduate to creating more complex parts and multi-view drawings.

Along the way you will learn the fundamentals of parametric modeling through the use of geometric constraints and relationships. You will also become familiar with many of Inventor's powerful tools and commands that enable you to easily construct complex features in your models. Also included is coverage of gears, gear trains and spur gear creation using Autodesk Inventor.

This book continues by examining the different mechanisms commonly used in walking robots. You will learn the basic types of planar four-bar linkages commonly used in mechanical designs and how to use the GeoGebra Dynamic Geometry software to simulate and analyze 2D linkages. Using the knowledge you gained about linkages and mechanism, you will learn how to modify your robot and change its behavior by modifying or creating new parts.

In the final chapter of this book you learn how to combine all the robot parts into assemblies and then run motion analysis. You will finish off your project by creating 3D animations of your robot in action.

There are many books that show you how to perform individual tasks with Autodesk Inventor, but this book takes you through an entire project and shows you the complete engineering process. By the end of this book you will have modeled and assembled nearly all the parts that make up the TAMIYA Mechanical Tiger and can start building your own robot.

## Table of Contents

1. Introduction - Getting Started
2. Parametric Modeling Fundamentals
3. CSG Concepts and Model History Tree
4. Parametric Constraints Fundamentals
5. Pictorials and Sketching
6. Symmetrical Features and Part Drawings
7. Datum Features in Designs
8. Gear Generator and Content Center
9. Advanced 3D Construction Tools
10. Planar Linkage Analysis using GeoGebra
11. Design Makes the Difference
12. Assembly Modeling and Motion Analysis

Index

 [Download Learning Autodesk Inventor 2016 ...pdf](#)

 [Read Online Learning Autodesk Inventor 2016 ...pdf](#)

# Learning Autodesk Inventor 2016

By Randy Shih

## Learning Autodesk Inventor 2016 By Randy Shih

This book will teach you everything you need to know to start using Autodesk Inventor 2016 with easy to understand, step-by-step tutorials. This book features a simple robot design used as a project throughout the book. You will learn to model parts, create assemblies, run simulations and even create animations of your robot design. An unassembled version of the same robot used throughout the book can be bundled with the book.

No previous experience with Computer Aided Design(CAD) is needed since this book starts at an introductory level. The author begins by getting you familiar with the Inventor interface and its basic tools. You will start by learning to model simple robot parts and before long you will graduate to creating more complex parts and multi-view drawings.

Along the way you will learn the fundamentals of parametric modeling through the use of geometric constraints and relationships. You will also become familiar with many of Inventor's powerful tools and commands that enable you to easily construct complex features in your models. Also included is coverage of gears, gear trains and spur gear creation using Autodesk Inventor.

This book continues by examining the different mechanisms commonly used in walking robots. You will learn the basic types of planar four-bar linkages commonly used in mechanical designs and how to use the GeoGebra Dynamic Geometry software to simulate and analyze 2D linkages. Using the knowledge you gained about linkages and mechanism, you will learn how to modify your robot and change its behavior by modifying or creating new parts.

In the final chapter of this book you learn how to combine all the robot parts into assemblies and then run motion analysis. You will finish off your project by creating 3D animations of your robot in action.

There are many books that show you how to perform individual tasks with Autodesk Inventor, but this book takes you through an entire project and shows you the complete engineering process. By the end of this book you will have modeled and assembled nearly all the parts that make up the TAMIYA Mechanical Tiger and can start building your own robot.

## Table of Contents

1. Introduction - Getting Started
2. Parametric Modeling Fundamentals
3. CSG Concepts and Model History Tree
4. Parametric Constraints Fundamentals
5. Pictorials and Sketching
6. Symmetrical Features and Part Drawings
7. Datum Features in Designs
8. Gear Generator and Content Center
9. Advanced 3D Construction Tools
10. Planar Linkage Analysis using GeoGebra

11. Design Makes the Difference
12. Assembly Modeling and Motion Analysis

Index

### **Learning Autodesk Inventor 2016 By Randy Shih Bibliography**

- Sales Rank: #1225064 in Books
- Published on: 2015-06-22
- Original language: English
- Dimensions: 10.75" h x 8.50" w x 1.25" l, 2.75 pounds
- Binding: Perfect Paperback
- 528 pages

 [Download Learning Autodesk Inventor 2016 ...pdf](#)

 [Read Online Learning Autodesk Inventor 2016 ...pdf](#)

## **Download and Read Free Online Learning Autodesk Inventor 2016 By Randy Shih**

---

### **Editorial Review**

### **Users Review**

#### **From reader reviews:**

##### **John Lee:**

Nowadays reading books are more than want or need but also become a life style. This reading practice give you lot of advantages. The huge benefits you got of course the knowledge your information inside the book that improve your knowledge and information. The data you get based on what kind of publication you read, if you want drive more knowledge just go with schooling books but if you want sense happy read one using theme for entertaining such as comic or novel. Often the Learning Autodesk Inventor 2016 is kind of book which is giving the reader unforeseen experience.

##### **Catherine Mejia:**

Reading a book tends to be new life style in this era globalization. With examining you can get a lot of information that may give you benefit in your life. Using book everyone in this world can easily share their idea. Guides can also inspire a lot of people. Lots of author can inspire their own reader with their story or their experience. Not only the storyplot that share in the ebooks. But also they write about advantage about something that you need instance. How to get the good score toefl, or how to teach your sons or daughters, there are many kinds of book which exist now. The authors nowadays always try to improve their ability in writing, they also doing some investigation before they write to the book. One of them is this Learning Autodesk Inventor 2016.

##### **Lisa Martin:**

You may spend your free time to study this book this reserve. This Learning Autodesk Inventor 2016 is simple to bring you can read it in the playground, in the beach, train and also soon. If you did not have got much space to bring often the printed book, you can buy often the e-book. It is make you easier to read it. You can save the actual book in your smart phone. And so there are a lot of benefits that you will get when one buys this book.

##### **Linda Harris:**

What is your hobby? Have you heard which question when you got college students? We believe that that query was given by teacher to the students. Many kinds of hobby, Every person has different hobby. Therefore you know that little person such as reading or as examining become their hobby. You have to know that reading is very important as well as book as to be the matter. Book is important thing to increase you knowledge, except your current teacher or lecturer. You get good news or update in relation to something by book. A substantial number of sorts of books that can you choose to use be your object. One of

them is actually Learning Autodesk Inventor 2016.

**Download and Read Online Learning Autodesk Inventor 2016 By  
Randy Shih #M743EKS1O2T**

# **Read Learning Autodesk Inventor 2016 By Randy Shih for online ebook**

Learning Autodesk Inventor 2016 By Randy Shih 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 Learning Autodesk Inventor 2016 By Randy Shih books to read online.

## **Online Learning Autodesk Inventor 2016 By Randy Shih ebook PDF download**

**Learning Autodesk Inventor 2016 By Randy Shih Doc**

**Learning Autodesk Inventor 2016 By Randy Shih Mobipocket**

**Learning Autodesk Inventor 2016 By Randy Shih EPub**

**M743EKS1O2T: Learning Autodesk Inventor 2016 By Randy Shih**