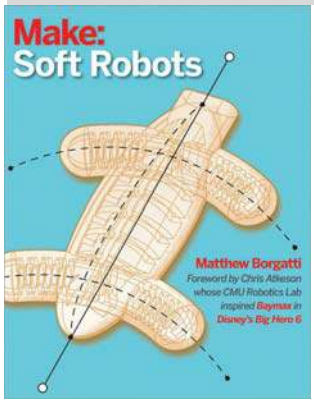
Maker Media



Soft Robotics
A DIY Introduction to Squishy, Stretchy, and Flexible Robots

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Summary:

Soft robotics is an emerging field that approaches robots in new ways, enabling them to operate in environments that are unstructured or unstable and to perform tasks that require delicacy and malleability. It's all about engineering with soft materials -- silicone, cloth, balloons, flexible plastics -- and combining them in different ways to come up with novel, approachable, and surprising solutions to interesting problems. This book introduces soft-robotics concepts to students, inventors, and makers with easy-to-understand explanations and hands-on DIY projects. The projects use a wide range of tools and techniques -- including microcontrollers, 3D printing, laser cutting, mold making, casting, and heat sealing -- to create intriguing soft robots and devices. It is tinkering at its finest!

- World's first DIY project book on soft robotics
- Written by designers working on the forefront of the field
- Approaches projects from simple introductions to more complex designs that build on what you know
- Explore robotics using novel materials and techniques you can apply to challenges far outside of robotics
- Soft robotics DIY projects that are relatively affordable, accessible and achievable.
- Explore and build creations from the brand new emerging field of robotics
- Provides context on the field of soft robotics alongside hands-on learning
- Teaches skills frequently overlooked
- Projects that are aesthetically appealing and novel
- Foreword by Chris Atkeson, whose research directly inspired the design of Big Hero 6's Baymax