1. Record Nr. UNINA9910427047003321 Autore Seneviratne Pradeeka Titolo Beginning e-textile development: prototyping e-textiles with wearic smart textiles kit and the BBC micro:bit / / Pradeeka Seneviratne Pubbl/distr/stampa Berkeley, California:,: APress,, [2020] ©2020 **ISBN** 1-4842-6261-1 Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (IX, 238 p. 346 illus., 345 illus. in color.) Disciplina 004 Soggetti Computer input-output equipment Hardware and Maker Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Chapter 1. Getting Started -- Chapter 2. Working with LEDs -- Chapter Nota di contenuto 3. Controlling with Buttons -- Chapter 4. Staying Warm -- Chapter 5. Textile Pressure Sensor -- Chapter 6. Textile Wetness Sensor --Chapter 7. Sending Sensor Data Using Bluetooth -- Chapter 8. Connecting your Garments to the Internet with Wifi. Electronic textiles (e-textiles) involve the combination of electronics Sommario/riassunto and textiles to form "smart" textile products. It is an emerging technology so learning it would be beneficial and chances to get opportunities in the field of wearables fashion technology. This book presents every essential to get you into the world of developing etextiles. There are many e-textile development platforms available in the market. Among them, this book uses Wearic smart textile kit which is a modular prototyping platform to present projects and experiments that you can build easily and quickly. The BBC micro:bit is used as the microcontroller for all the projects and all the code presented are build using MakeCode blocks: an easy-to-use visual programming language.

The projects/experiments presented in this book require no soldering but requires wiring using alligator cables. You will: How to apply

electronics to wearables/ garments/ fabrics Programming with the BBC micro:bit Add lights to your wearables using LED textiles Use 'heating textiles' with garments to keep your body warm Use 'textile push buttons' to actuate something attached to your wearables Use 'textile

pressure sensors' to enable garments to sense touch and pressure Use 'textile wetness sensors' to detect water and some other liquids Use Bluetooth Low Energy to send sensor data to mobile apps.